Océ Graphics Server L

Startup Manual

Océ-Technologies B.V.

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Code number 7055891
Edition 1.2

US

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Chapter 1
Read Me First

This manual has been written to guide you through the basic tasks you will carry out using Océ Graphics Server L. It is intended for all users.

Introduction

What is Océ Graphics Server L?

Océ Graphics Server L is a powerful software application that allows you to print full color PostScript and bitmap files to your Océ 5350 inkjet printer.

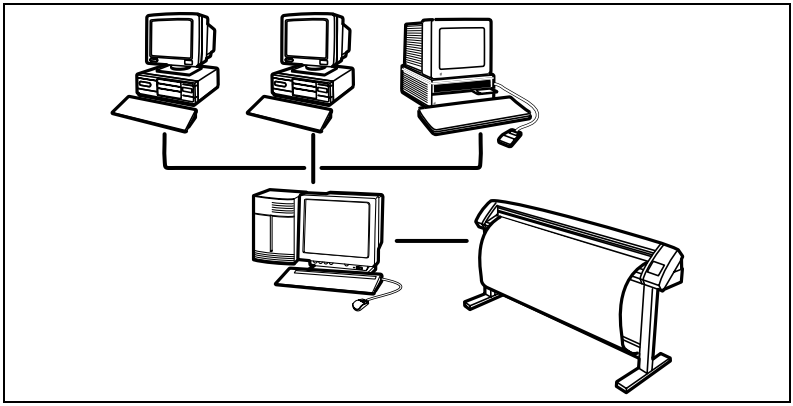
Océ Graphics Server L RIP

Océ Graphics Server L is a Raster Image Processor (RIP). Its main function is to receive the complex descriptions of pages with integrated text, graphics and images that comprise PostScript files and translate each page into a format that is understood by your printer.

Océ Graphics Server L on the network

Océ Graphics Server L also acts as a print server. It allows you to send drawings from a Windows PC or Macintosh workstation to a print queue on the server workstation, from which the files are submitted to the printer.

You can create up to 14 print queues for each Océ 5350 printer connected to the Server workstation and publish them over the network.



[1] Océ Graphics Server L on the network

Océ Graphics Server user documentation

Océ Graphics Server L includes the following set of user documentation. Since not all users are interested in knowing how to use all aspects of the software, the following summary indicates which parts of the documentation are probably most relevant to different types of users.

Installation Manual

The installation manual explains how to install the Océ Graphics Server L software on your server workstation. It also explains how to connect your server to your network and how to set up workstations on the network so that they can send files to the server to be printed. It is intended for:

- systems administrators or advanced users responsible for setting up the Server workstation and the client workstations on the network.

Start Up Manual

This manual explains the basic features of Océ Graphics Server L that most users will need to know. It is aimed at two types of user:

- users who are connected to the Océ Server on the network and need to know how to print a file to the spool queue from their workstation
- users who will be using Océ Graphics Server L from the Server workstation and need to know how to use the main features of the Océ Server.

Reference Manual

This manual explains the advanced features of Océ Graphics Server L and is intended for:

- advanced users who will be using the Océ Server from the Server workstation and will be dealing with issues such as color calibration, setting up spool queues and creating printer configurations

- systems administrators responsible for setting up and configuring the Océ Server workstation and setting up the Server to be used over the network
- advanced users dealing with PostScript programming and troubleshooting.

Online Help files

Océ Graphics Server L has its own Windows online Help file. Once the software has been correctly installed, you can consult the online Help if you need a quick explanation of a menu or dialog box option or a task to perform.

▼ **To open the Océ Server Help file**

- Click on a Help button in a dialog box **or**
- Choose Index from the Help menu in the main window of the Océ Server **or**
- Choose the Océ Server Help icon from the Océ Graphics Server program folder

Océ Graphics Server L also has an online Quick Start Guide tutorial intended for new users who would like an introduction to the product. It explains just the main features of Océ Server and contains step-by-step procedures for carrying out some basic tasks with the software.

▼ **To open the Quick Start Guide**

- Choose the Quick Start Guide icon from the Océ Graphics Server program folder

How to use this manual

This manual is divided into the following chapters:

Chapter 1 - Read Me First introduces you to the product and explains how to use the user documentation in general and this manual in particular.

Chapter 2 - Printing from an application describes how to print a PostScript file from an imaging application to Océ Graphics Server L from an Apple Macintosh or Windows PC workstation.

Chapter 3 - Printing from Océ Graphics Server describes how to use the basic features of the Océ Graphics Server main window and how to manage and print files arriving in spool queues.

Chapter 4 - Optimizing printing describes how to set printing options such as paper source, image rotation and scaling from the Océ Server main window.

Chapter 5 -Tiling and Cropping describes how to use the Tile and Crop module built into the Océ Server for preparing and printing out tiles that will later be assembled to make up very large format posters and wall coverings.

Chapter 6 - Monitoring status and log files explains how to use the features of Océ Server that allow you to keep track of your files and workload.

Chapter 7 - Using the Remote RIP software explains how to use the Remote Océ Server RIP software module, which allows client workstations on the same network as the Océ Server to see the main Server window directly.

Appendix - Miscellaneous contains a list of Océ offices worldwide and a reader's comment sheet.

Index - A quick reference section.

Chapter 2
Printing from an application

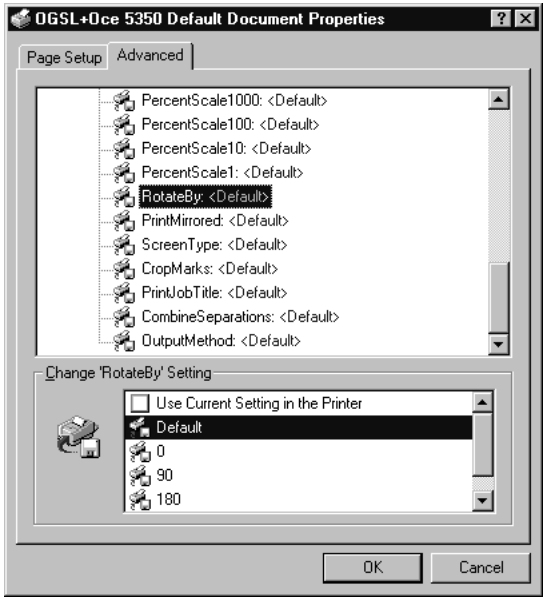
This chapter explains how to send files to the Océ Server from graphics and word processing applications on your Windows PC or Apple Macintosh network workstation.

Settings from within the PostScript Printer Description (PPD)

From Macintosh or PC workstations, you can select the following options from the PPD at print time. Each setting affects the corresponding value at the RIP for that job only. It does affect values unless you specify so from within OGSL.

▼ **To make settings from within the PPD**

1. **From the Windows Start menu, select Settings, then Printers.**
2. **Select the printer and right-click to display a short-cut menu.**
3. **Select Document defaults.**
4. **Click the Advanced tab and go to Document options in the arborescence.**
5. **Select PostScript options. The following window displays the available options:**



PPD options/settings	Function
Screen type ■ Standard ■ Error Diffusion ■ FM ■ Normal Inkjet ■ Adjusted Inkjet ■ 400 dpi Electro ■ 200/300 dpi Electro	Selects a different screening option **Note:** *When printing to the Océ 5350, select "adjusted inkjet", as all profiles delivered with the printer are optimized for this screening method.*
Combine separations ■ On: applies the same plate order as specified in the RIP settings ■ Off	
Output method ■ Direct to printer: sends data to the printer as it is processed ■ Save to file then print: saves the processed file in a temporary buffer directory before sending it to the printer ■ Print via REPRINT: stores the file in a special format for post-printing	
Percentage scaling ■ PercentageScale1000 ■ PercentageScale100 ■ PercentageScale10 ■ PercentageScale1	Selects a scaling factor for a single print **Example:** *If you select 0 from 1000's, 3 from 100's, 7 from 10's, and 5 from 1's, you get a 375% scaling factor for that print only.*
Rotate by ■ 0, 90°, 180°, 270°	Rotates the print job from the PPD
Print Mirrored ■ On ■ Off	Mirrors the print job
Crop Marks ■ Off ■ Outline: draws a dotted outline around the image (outside print area) ■ Corners: draws normal corner crop marks (outside print area) ■ OutlineWithinPrintArea ■ CornersWithinPrintArea	Adds crop marks to the print (from PPD only)
Marks position ■ MarksOutsidePrintArea: places crops on the edge of the image ■ MarksInsidePrintArea: places crops 3mm inside the image to simulate bleed	

PPD options/settings	Function
Print Job Title ■ No text ■ Print Job Name ■ Print Date and Time ■ Print Job Name and Date and Time	Adds text under the image

▼ **To keep modified settings**

1. In the OGSL main window, right-click the printer icon and select **Properties**.
2. Select the **Output** tab.
3. Enable the option 'Allow jobs to control printer via PPD settings'.

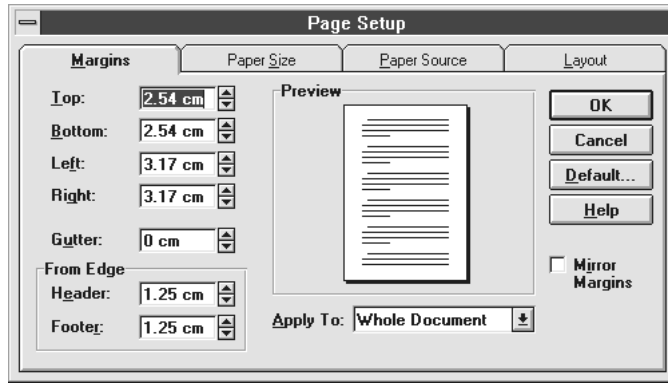
Printing from Windows applications

Note: *In order to print to the Océ Server from your workstation, the PostScript Printer Definition files (PPDs) which describe the Océ Server to your application must be installed on your workstation. The Océ Graphics Server L Installation Manual contains instructions for installing the appropriate software and setting up workstations.*

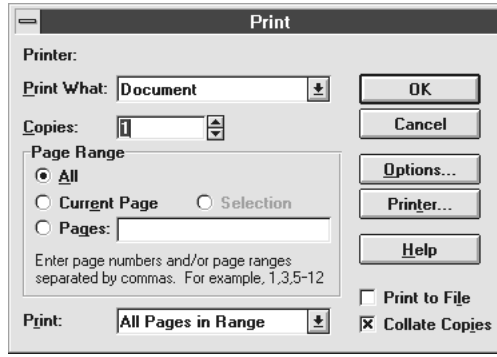
When you are ready to print to the Server from within your application, select **Page Setup** and then **Print**.

For example:

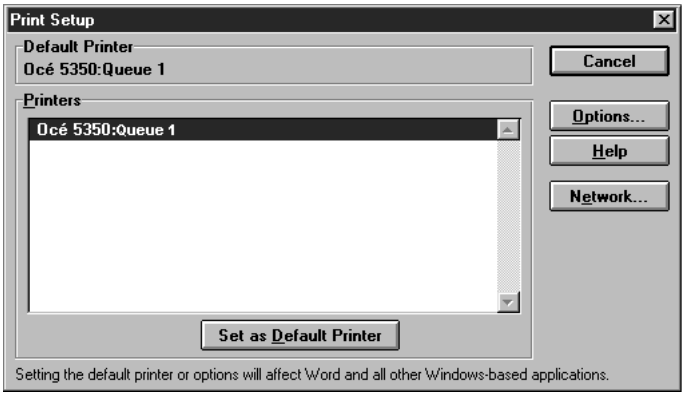
Suppose you have created a printable file in Microsoft Word Version 6.0. First select **Page Setup** from the **File** menu to specify Margins, Paper Size, Paper Source and Layout.



Then select **Print** from the **File** menu to specify print details, such as the number of copies required and page ranges.



The **Print** dialog box contains a **Printer…** button. Click on this button to display the **Print Setup** window where you can select and set the appropriate Océ Server printer as the default printer.



Once you have set an Océ Server printer as the default printer, click on **OK** in the Print dialog window to automatically print your file to the Server spool queue for that printer.

Printing from Apple Macintosh applications

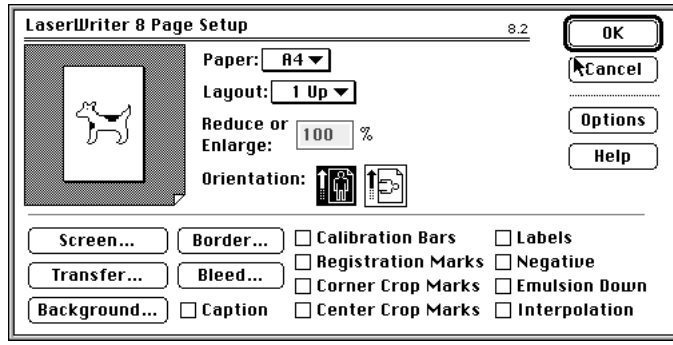
Note: *The Océ Server is supplied with an Apple Macintosh Printer Drivers disk. This contains all the PostScript Printer Definitions (PPDs) and Printer Description Files (PDFs) necessary to set up most available applications on the Macintosh. These must be installed on your workstation before you can print to the Océ Server. Instructions for installing this disk are in the Océ Graphics Server L Installation Manual.*

When Services for Macintosh are installed on the Océ Server, any printer queue set up in the Océ Server is automatically published to a Macintosh workstation through the Chooser. Select the **LaserWriter 8.x** printer driver and, if your network has zones, the **AppleTalk** zone. The Server print queues will appear on the right side of the Chooser under the heading 'Select a PostScript Printer'. Select an Océ Server print queue, click on the **Chooser Setup** button and then select the **Océ 5350 Large Format PPD**.

Return to your application. To send your job across the network to the Server, first select **Page setup** and then **Print**.

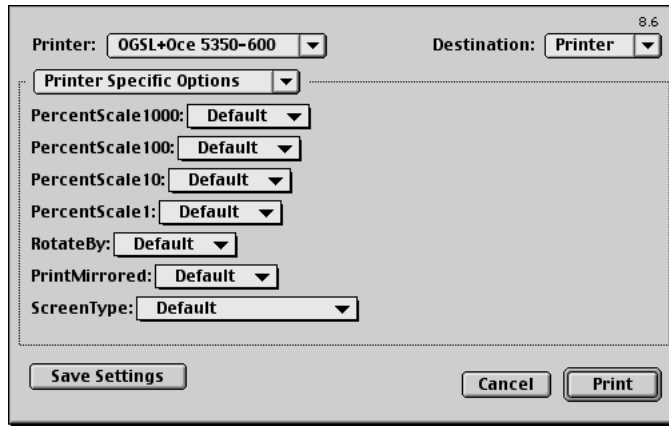
For example:

Suppose you have created a printable file in QuarkXPress. Open the file in QuarkXpress and select **Page Setup** from the **File** menu.



Click on the **OK** button to save your settings.

Then select **Print** from the **File** menu to open the 'Printer:' dialog box.



Click on the **Print** button to print your job across the network to the Océ Server.

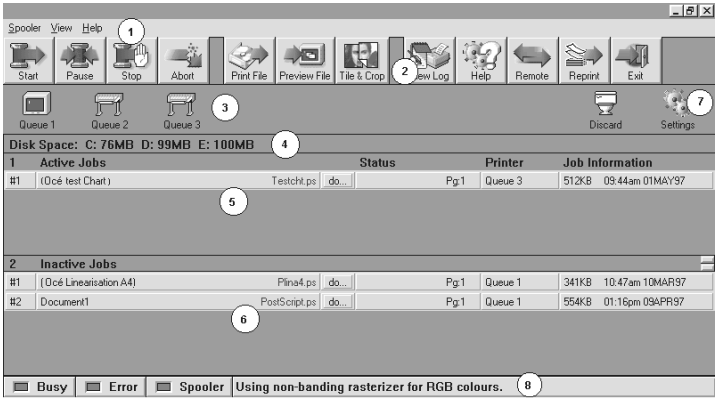
Chapter 3
Printing from Océ Graphics Server

This chapter explains how to print files manually and automatically from the Océ Graphics Server and how to manipulate jobs in spool queues.

Starting the Océ Server

Installing the programs from the Océ Server Program Installation CD creates an Océ Server entry on your machine. (For details of how to install the programs, please see the Océ Graphics Server L Installation Manual.)

1. Click on the **Start** menu and choose **Programs**.
2. Choose the **Océ Graphics Server L** in the Océ Graphics Server L folder to start the Océ Server and display the main screen.



1. Menu bar
2. Button Bar
3. Print Queue Icon Bar
4. Job Information Bar
5. Active Jobs List
6. Inactive Jobs List
7. Settings Icon
8. Status Bar

Receiving jobs in spool queues

The middle section of the Océ Server main screen displays the Active Job List (**5**) and the Inactive Job List (**6**).

All jobs that arrive in one of the spool queues are displayed in the Active Job List (jobs waiting to be printed) by default.

Once printed, the Océ Server sends a job to the Inactive Job List by default. (Jobs displayed in the Inactive Job List have either been printed or are on hold.)

Information about each job is displayed, such as its name, size, printer, date and time of arrival in queue.

Printers ready to receive print jobs

Each icon displayed in the Print Queue Icon Bar represents a printer. The presence of the icon in the Bar means that the device represented has a spool queue assigned to it and is set up ready to receive print jobs.

This icon in your Print Queue Icon Bar represents the Océ Server Previewer. The Previewer does not produce hard copy printouts but displays files spooled to it on screen for you to preview.

Automatically starting print jobs

The Océ Server will automatically send any files found in the Active Job List to the appropriate printer when the spooler is started.

Click on the **START** button on the Button Bar (2) to start the Server spooler.

Click on the **STOP** button on the Button Bar when you want the Server to complete the current job but accept no more jobs from the Active Jobs list.

Click on the **PAUSE** button on the Button Bar when you want to pause the automatic printing process. The Server will complete the processing of an image but will not send it to the printer. If a job was printing, the Server will complete that image but will not send additional copies. When PAUSE is selected, a dialog box opens on screen, prompting you to select **OK** when you wish to continue.

Click on the **ABORT** button on the Button Bar and push the RESET button on the printer console when you want to cancel the current job. The Server will then continue with the next job in the Active Jobs list.

You can also **Start** and **Stop** the Océ Server spooler by clicking on Spooler in the Océ Server Menu Bar (**1**) and selecting **Start Spooler** and **Stop Spooler** from the drop-down menu.

Printing individual jobs

This is useful if you need to print an individual job manually.

Printing a job from a spool queue

When the individual job you wish to print is in a spool queue, it will be stored in either the Active Jobs List or the Inactive Jobs List. You then have three ways of printing it manually from within the Océ Server main screen:

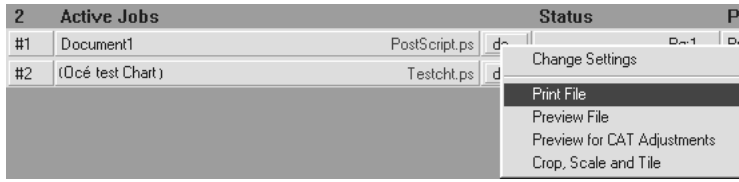
▼ **The drag-and-drop method**

Select the job you wish to print by clicking on it. Then drag and drop the job onto the Print Queue icon representing the printer you want to print the file to. This method also allows you to select several jobs at the same time.

▼ **The do... button method**

1 Click on the **do...** button beside the name of the job you wish to print.

2 Select **Print File** from the do… button drop-down menu.



The Océ Server will send the job to the printer for which the job is queued.

▼ **The Print File button method**

1 Select the job you wish to print by clicking on it.

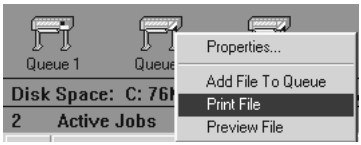
2 Click on the Print File button in the Océ Server Button Bar. The Océ Server will send the job to the printer for which it is queued.

Printing a job that is not in a spool queue

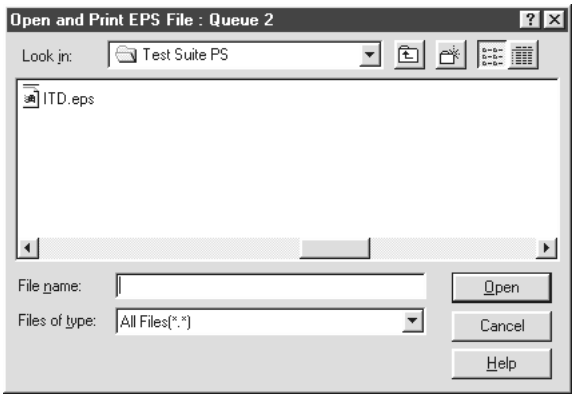
When you wish to print a PostScript file located on a floppy disk or elsewhere on the network, you can still find and print it from within the Océ Server main screen.

▼ **The Print Queue icon method**

1 Click the Print Queue icon representing the printer you wish to print the file to.



2 Select **Print File** from the drop-down menu.
An 'Open and Print EPS File' dialog window will appear.



3 Locate and select the file you wish to print.
4 Click on the **Open** button.
The Océ Server will interpret and send the file to the printer.

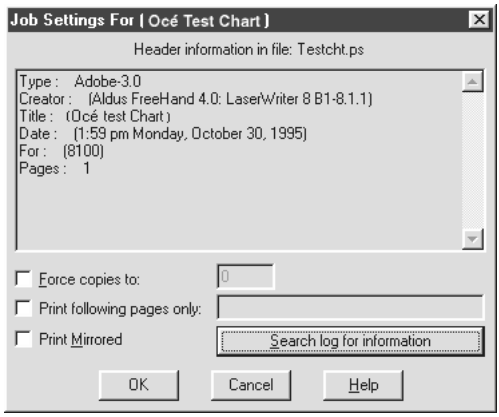
▼ **The Print File button method**

1 Make sure there are no jobs selected in the Active and Inactive Jobs Lists.
2 Click on the Print File button in the Océ Server Button Bar.
The 'Open and Print EPS File' dialog window will be displayed.
3 Locate and select the file you wish to print and click on the **Open** button.
The Server will interpret and send the file to the printer to which the first spool queue set up has been assigned.

Changing settings for an individual print job

Click on the **do...** button for the individual job and select **Change Settings** from the drop-down menu of options. Any settings made via this option are specific to the individual job associated with the **do...** button you click on.

The 'Job Settings For' dialog box opens. This box shows all the header information for that job and allows you to make three job-specific settings.



To specify the number of copies to be printed Check the **Force copies to:** checkbox and type in the number of copies required in the edit box. The setting you make here will override the copies command in a PostScript file.

To print a selection of pages If you have a multi-page document, you may wish to print or preview only a selection of those pages. To do this, check the **Print following pages only** checkbox and then enter the required page numbers in the edit box.

-To print a range of pages, type in the first page number followed by two dots and then the last page number. Example: Typing 1..7 will print pages 1 to 7.

-To enter a single specific page, type in the page number.

-To enter several specific pages, type in each page number separated by a comma. Example: Typing in 15, 17, 23 will print pages 15 and 17 and 23.

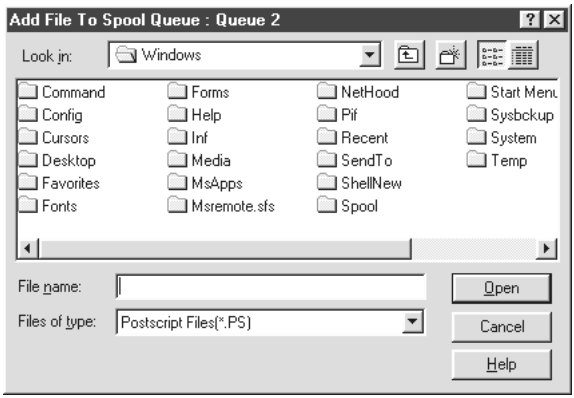
To make the job print mirrored Check the **Print Mirrored** checkbox.

Click on the **OK** button at the bottom of the Job Settings For dialog box to save your settings and return to the Océ Server main screen. The Océ Server will apply the settings when you print the job.

Adding a PostScript or bitmap file to a spool queue

Most jobs are printed to the Océ Server spool queues from within applications. However, sometimes you may wish to locate a PostScript or bitmap file stored on your network system and add it to a spool queue from within the Océ Server main screen. To do this:

1. Click on the Print Queue icon of the target printer spool queue.
2. Select **Add File To Queue** from the drop-down menu.
   An **Add File to Spool Queue** dialog window will open.



3. Locate and select the file you wish to print.
4. Click on the **Open** button.
   The file appears as a job in the Active Jobs or Inactive Jobs list. depending on the setting in the Printer Setup/PrintQueue tab.

Note: *If there is already a file with the same name as the one you are adding, the message "Copy error: Could not open destination file" appears in the status bar at the bottom of the main screen. The new file does not go over to the spool queue.*

Rearranging jobs in queues

You can select and deselect a single job or several jobs at a time from the Active and Inactive Job Lists. Selected jobs are highlighted on screen and, once selected, can be moved around.

▼ **To select jobs**

- Click on the job to select a single job.
- Click and drag across the jobs to select two or more adjacent jobs.
- Hold down the **Ctrl** key and click on each job to select two or more jobs that are not adjacent to each other.
- To deselect jobs, position the cursor in the list where the job or jobs are located and right click.

▼ **To move jobs around**

- To move jobs around, simply drag and drop them. In this way, you can move jobs between the Active and Inactive Job lists and change their position in either list. This operation may take several seconds.
- When you are moving jobs around in the same list, you can insert them at a specific position. To do this, select the job(s) for insertion and then click between the two jobs currently in the list between which you wish to insert the selected job(s).
- When you want to move jobs from one list to the other and insert them at a specific position, first drag them from one list and drop them on the other. Then, insert them by clicking between the two jobs where you want them to be inserted.
- Any single selected job can be dropped onto any Print Queue icon and it will be immediately printed to that queue rather than the queue where it is resident, unless there is a job already running through the interpreter.

▼ **Keyboard functions**

When dropping a job on a Print Queue icon, you can hold down the **Ctrl** and/or **Shift** keys on your keyboard for increased flexibility.

- Drop a job on a Print Queue Icon to print the job to that queue.
- Hold down the **Ctrl** key and drop a job on a Print Queue Icon to move the job to that queue permanently.
- Hold down the **Shift** key and drop a job on a Print Queue Icon to preview the job to that queue.

Deleting jobs from queues

Drop selected jobs on to the Discard Icon.

Controlling the Server main screen from a workstation

Installing the Océ Server Remote RIP Server on your network and the Océ Server Remote RIP Client on your workstation will enable you to both see the Server main screen and carry out many of the functions described in this section from your workstation.

For further details on the Océ Remote RIP Client software, please (see chapter 7, ‘Using the Remote RIP Software’ on page 67).

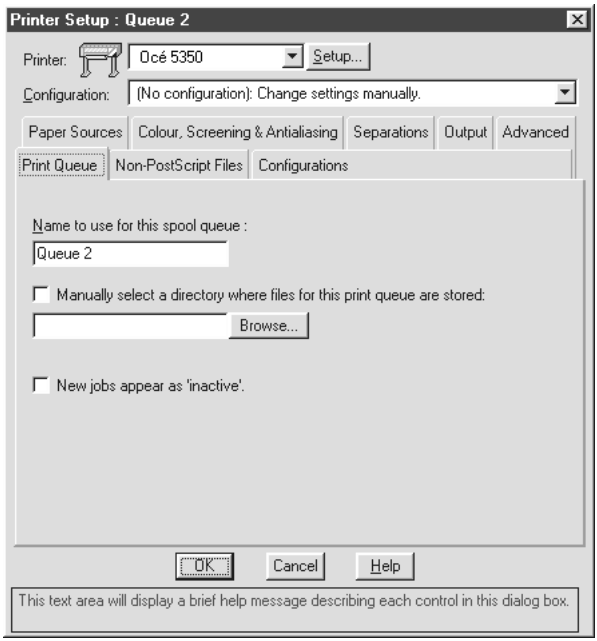
Note: *Advanced printing features of Océ Server are described in the Océ Graphics Server L Reference Manual.*

Chapter 4
Optimizing printing

This chapter describes the many features of Océ Graphics Server L which you can use to optimize the ease and quality of your printing.

Opening the Printer Setup dialog box

1. Click on the Print Queue icon of the printer spool queue for which you wish to specify the settings.
2. Choose **Properties** from the drop-down menu.
   The Printer Setup dialog box will open.



Note: *Any settings made within the Printer Setup dialog box will apply to all files printed through that spool queue.*

What is a printer configuration?

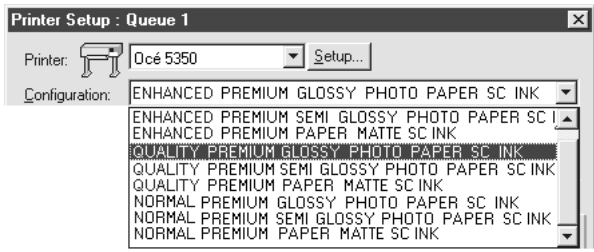
The quality of your printouts will depend upon factors such as the type of paper and inks you have loaded in your printer. A printer configuration is a set of printer settings that you can make in Océ Server and then store to be used later. These settings can include paper type and paper source, printing resolution, enlargements, reductions, and rotations. You can save different configurations for the same printer and choose the configuration at print time.

Selecting a printer configuration

The **Printer** list box on the Printer Setup dialog box displays the type of printer currently selected.

The **Configuration** list box shows the current configuration of the selected printer.

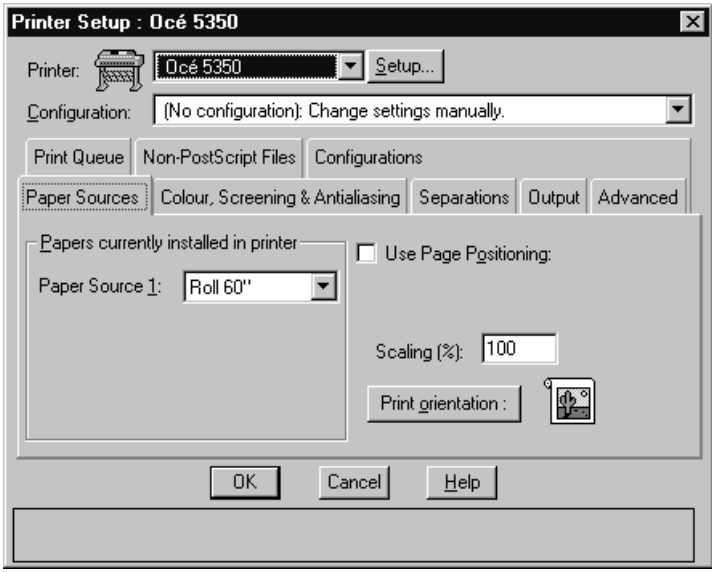
1 Click on the down arrow in the **Configuration** list box to display the full list of available configurations.


Printer Setup : Queue 1
Printer:
Océ 5350
Setup...
Configuration:
ENHANCED PREMIUM GLOSSY PHOTO PAPER SC INK
ENHANCED PREMIUM SEMI GLOSSY PHOTO PAPER SC I
ENHANCED PREMIUM PAPER MATTE SC INK
QUALITY PREMIUM GLOSSY PHOTO PAPER SC INK
QUALITY PREMIUM SEMI GLOSSY PHOTO PAPER SC INK
QUALITY PREMIUM PAPER MATTE SC INK
NORMAL PREMIUM GLOSSY PHOTO PAPER SC INK
NORMAL PREMIUM SEMI GLOSSY PHOTO PAPER SC INK
NORMAL PREMIUM PAPER MATTE SC INK

2 To select a new configuration, click on it.
3 Click on the **OK** button at the bottom of the Printer Setup dialog box to save and apply your configuration and return to the Server main screen.

Specifying a printer paper source

1 Click on the **Paper Sources** tab on the Printer Setup dialog box.



2 To specify the paper currently installed in your printer, click on the down arrow in the **Paper Source 1** list box. Select the appropriate paper, e.g. 36" roll, from the drop-down list of paper sources.

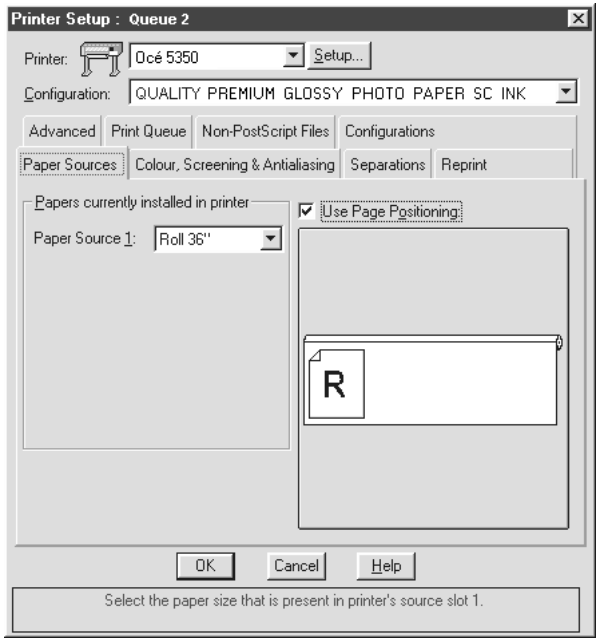
3 Enter a scaling factor (as a percentage) and a print orientation, if applicable. This option is disabled if you select 'Page positioning'. All files printed in this queue will apply these settings.
Note: *This is possible only if the Paper Sources option was unchecked when you saved the printer configuration in the Configurations tab.*

4 Click on the **OK** button at the bottom of the Printer Setup dialog box to save and apply your setting and return to the Server main screen.

Enlarging and reducing the image size

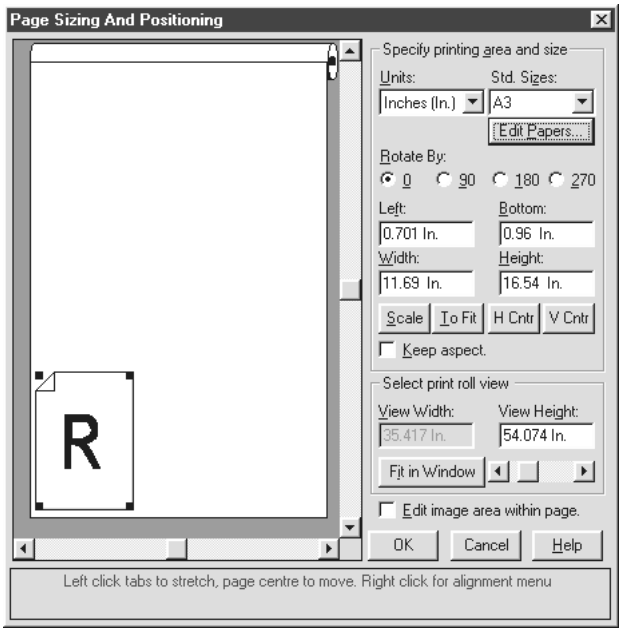
Image size and positioning are also selected on the **Paper Source** tab. This selection is possible only if the Paper Sources option was unchecked when you saved the printer configuration in the Configurations tab.

1 Check **Use Page Positioning** to display an image of the selected paper source and current page positioning.



2 Click on the image to open a detailed Page Sizing and Positioning dialog box.

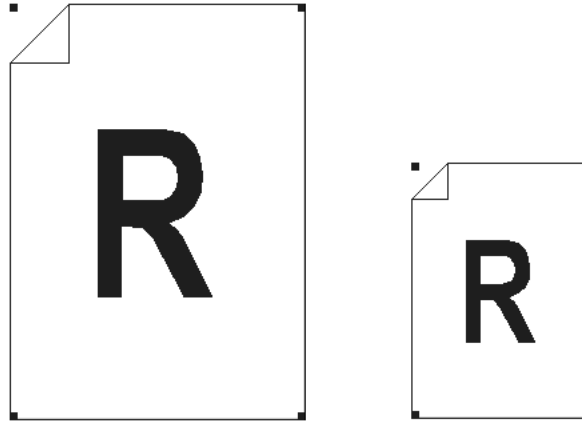
The left side of this dialog window shows a representation of the paper loaded on the output device and of the printing area. The printing area is represented by the "R" page icon.



There are several ways to enlarge or reduce the size of your image for printing:

▼ **By dragging**

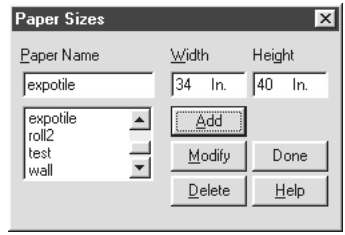
This is a quick way to visually change the size of your image. Click on a black rectangle in a corner of the "R" page icon and drag it.



▼ **By selecting a standard or custom size**

1 Click on the down arrow in the **Std. Sizes** edit box. A list of standard sizes will be displayed.
2 Click on the required size.
The currently selected size is displayed in the **Std. Sizes** edit box.

You can also create and save your own custom sizes by clicking on the **Edit Papers** button to access the Paper Sizes window.



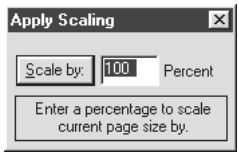
▼ **By entering exact width and height values**

You can specify the exact size of the printing area of your image by typing in the desired values in the **Width** and **Height** edit boxes. Press the **Tab** key to see the effect of your settings.

Check the **Keep Aspect** box to automatically calculate the other dimension of the print area when you type a new figure in the Width or Height edit box and press **Tab**.

▼ **By scaling your image**

Click on the **Scale** button on the Page Sizing and Positioning dialog window and enter a percentage by which to scale your current page size.



Alternatively, click on the **To Fit** button to automatically scale the printing area of your image to the sizes set in the View Width and View Height edit boxes.

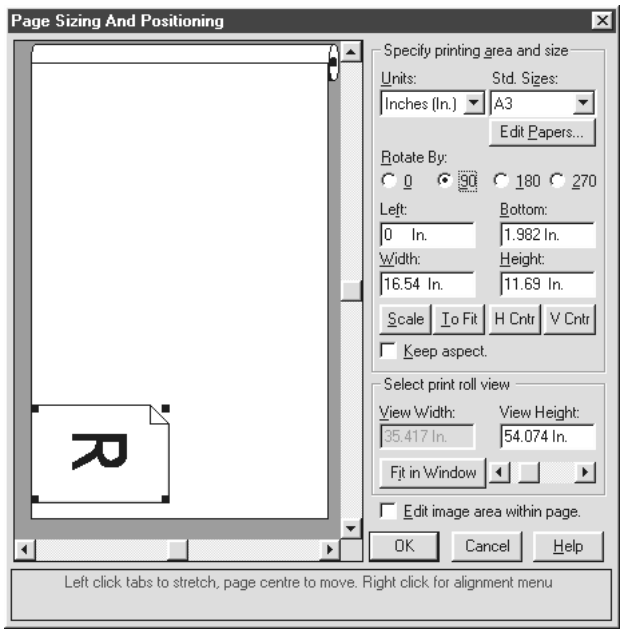
Note: *Due to the way in which some PostScript jobs are created, page positioning may not always operate as expected.*

If you have problems with page positioning for a particular Post Script file, uncheck the **Use Page Positioning** option on the Paper Sources tab to enlarge the job using Océ Poster Layout or Tile & Crop.

Similarly, when configuring spool queues within Océ Server in order to print files created by the Océ Poster Layout application, the **Use Page Positioning** option in the Paper Sources tab must be **unchecked**. This is because Océ Poster Layout creates its own page sizes.

Rotating the image

The Page Sizing and Positioning dialog window has a **Rotate By** option. To rotate your image on the paper click on the appropriate option. Choices are 0°, 90°, 180°, 270°.



If you check 0° rotation, your image is restored to its original size.

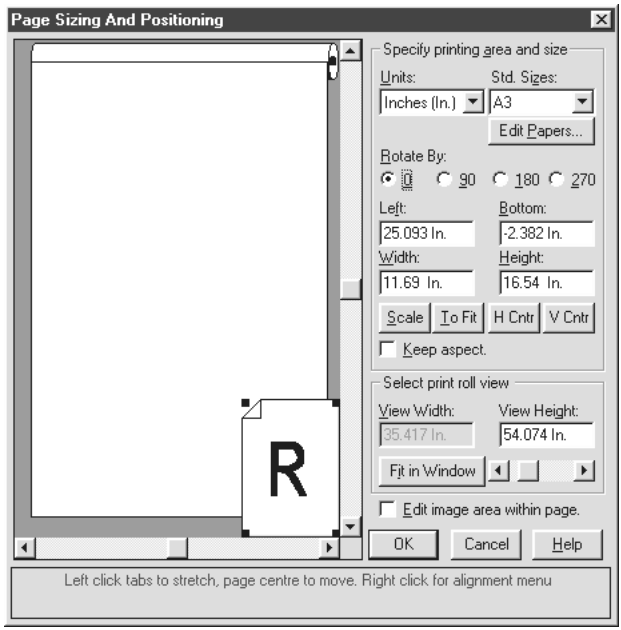
Positioning the image on paper

The Page Sizing and Positioning dialog window has several ways to specify where your image is positioned on the paper.

▼ **By clicking and dragging**

The fast way to change the position of your image on the paper is to simply click on the "R" Page icon and drag it to where you want it to print. If the "R"

Page is dragged partially off the paper, only the portion of the image that remains positioned on the paper will print.



▼ **By entering exact values**

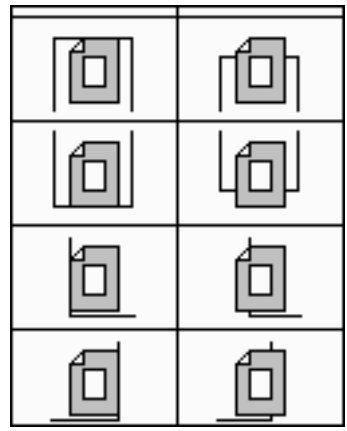
The values displayed in the **Left** and **Bottom** edit boxes give the current position of your image in relation to the left and bottom edges of the paper loaded in the printer. A "0" value in each edit box positions your image in the bottom left corner of the paper. Type in different values to reposition the image and press **Tab** to see the effect.

▼ **By centering your image**

Click the **H Cntr** and **V Cntr** buttons to center your image horizontally and vertically in the paper preview on the dialog box.

▼ **By aligning your image**

Right-click with the mouse on the left side of the Page Sizing and Positioning dialog box. An alignment menu will be displayed. Select one of the icons. Your image will be aligned as shown on the icon.

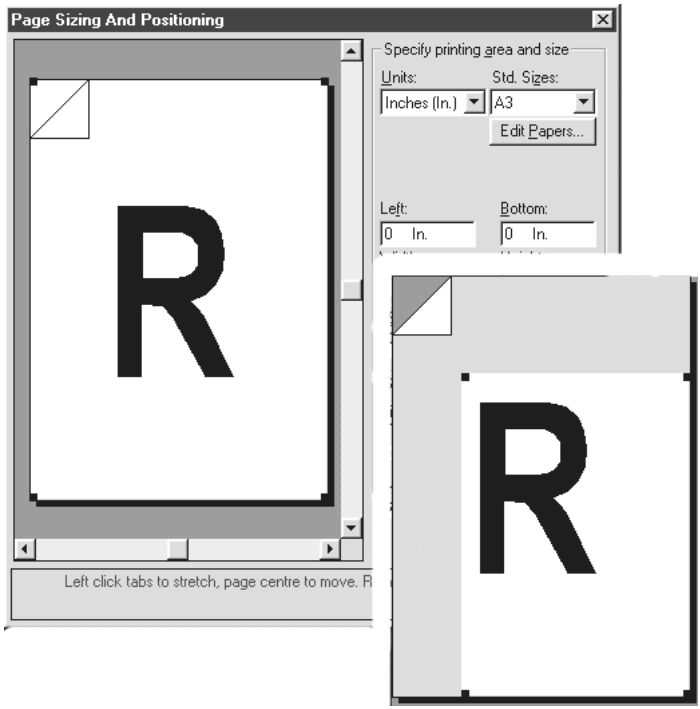


Cropping an image

There is an **Edit image area within page** option at the bottom of the Page Sizing and Positioning dialog box.You can use this option as a cropping tool.

Check the option to change the left side of the Page Sizing and Positioning dialog box to show only the white "R" Page icon. This represents the image area inside your page and will typically be as large as the entire page.

Drag the black handles in each corner of the "R" Page to modify the area of the image you wish to print, thereby cropping the image.

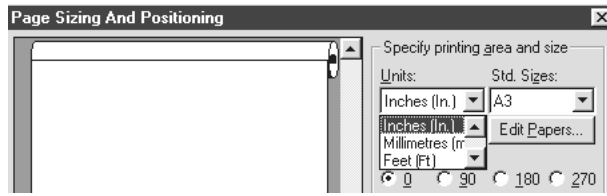


The gray area on the page is the part of the image that will not print. The white area is the remainder of the image that you do wish to print, i.e. your cropped image. You can move your cropped image at this point by clicking in the center of the white area and dragging it to a new position on the page.

When you check the **Edit image area within page** option, a **Zero margins** button appears on the right side of the Page Sizing and Positioning dialog window. Click on the **Zero margins** button if you wish to restore the original image area inside the page and "undo" any cropping.

Changing units

Click on the down arrow in the Units edit box to select from inches, feet, millimeters, meters or point units to work with while sizing.



Changing your view of the paper

The values in the **View Width** and **View Height** edit boxes indicate the dimensions of the paper loaded on your printer. If you have roll paper loaded, the view width will not change but you can adjust the view height in order to see more of the paper unrolled. If you have cut sheet paper loaded, the dimensions are for viewing purposes only.

Click on the **Fit in Window** button to scale the paper view to fit in the available space in the dialog box.

When you are satisfied with the size and position of your image on the paper, click on the **OK** button to save your settings and return to the Paper Sources tab in the Printer Setup dialog box. Click on the **OK** button at the bottom of the Printer Setup dialog box to save and apply settings and return to the Server main screen.

Chapter 5
Tiling and Cropping

You can use the Océ Server to tile and crop an individual job by selecting a job from a spool queue and loading it into the tiling and cropping area of the Server. The Océ Server will create a preview image on screen divided into tiles. By adjusting the controls on screen or by entering exact dimensions, you can then crop the image, define its final output size, and define the size of the tiles and the horizontal and vertical overlap.

Loading a job into Tile and Crop

There are two ways to load a job into the tiling and cropping area of the Océ Server:

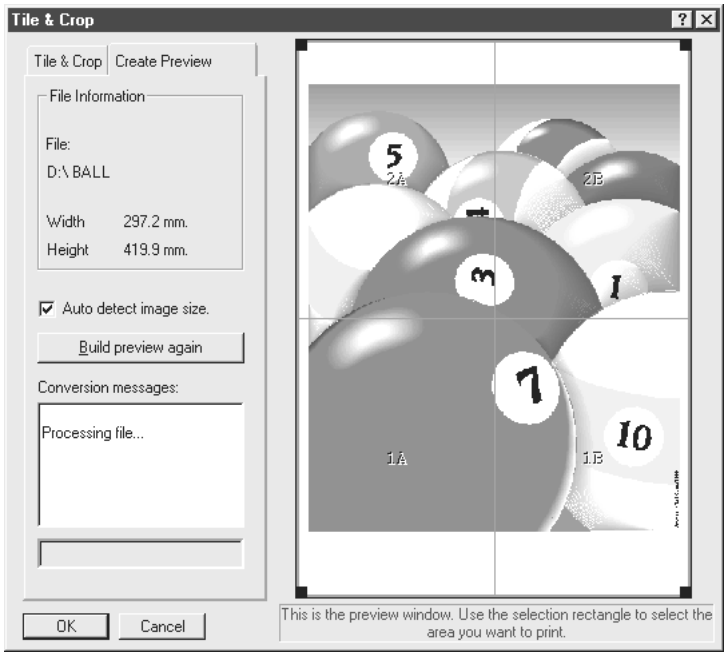
▼ **The do… button method**

Click on the **do…** button of the job you want to import and select **Crop, Scale and Tile** from the drop-down menu.

▼ **The Tile & Crop button method**

Click on the job you want to tile or crop in the Server Active or Inactive Jobs list. Click on the **Tile and Crop** button on the Océ Server Button Bar.

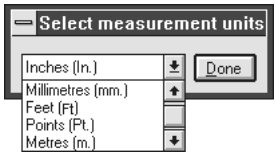
The Tile & Crop window will open and the Océ Server will create a preview of your image ready for tiling and cropping. This preview is displayed on the right side of the Tile & Crop window. The window has two tabs, Create Preview and Tile & Crop. Create Preview is the default tab.



Changing measurement units

The top section of the Create Preview tab is headed 'File Information'. This section contains the name and dimensions of the file displayed in the preview area of the screen.

To change the units used to measure your image, for example, from inches to centimeters, select the **Tile & Crop** tab. Click on the **Units…** button at the bottom of the tab. The Select measurement units dialog box will be displayed.



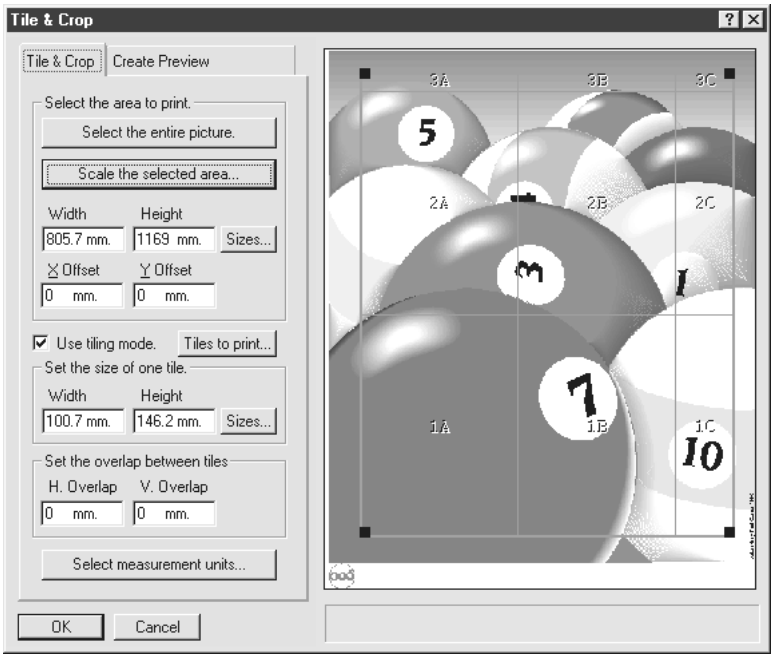
Click on the down arrow in the units edit box and select the units you want to work in from the drop-down list. Click on the **Done** button to close the dialog box.

Whenever you change the units in this way, you must recreate your preview image. Select the **Create Preview** tab and click on the **Build preview again** button. The Océ Server will update the image dimensions in the newly selected units.

Note: *If you are processing a job that does not contain a paper size, such as an EPS file, the Océ Server will place the image in the bottom left corner of the page by default. Check the* **Auto detect image size** *checkbox to cause the Océ Server to use the actual area of the object on the page to create and size the preview. If you use the Auto detect image size option in this way, you must recreate your preview image by clicking on the* **Build preview again** *button in the Create Preview tab.*

Specifying final image size

Select the **Tile & Crop** tab.



The top section of this tab headed 'Final print size' displays the final current size of the image created when all the tiles are joined together. This would normally be larger than the paper you are printing onto.

To specify a final print size either:

- Click on the down arrow in the edit box and choose from the drop-down list or

- Type the desired Width or Height of the final image in the appropriate box and then press the **Tab** key.

When you enter a Width or Height and press **Tab**, the Server will automatically size the other dimension proportionally for you.

Specifying tile size

Select the **Tile & Crop** tab. Tile size is specified in the 'Tile size' section of this tab and is normally set to the width and height of the paper you are printing onto.

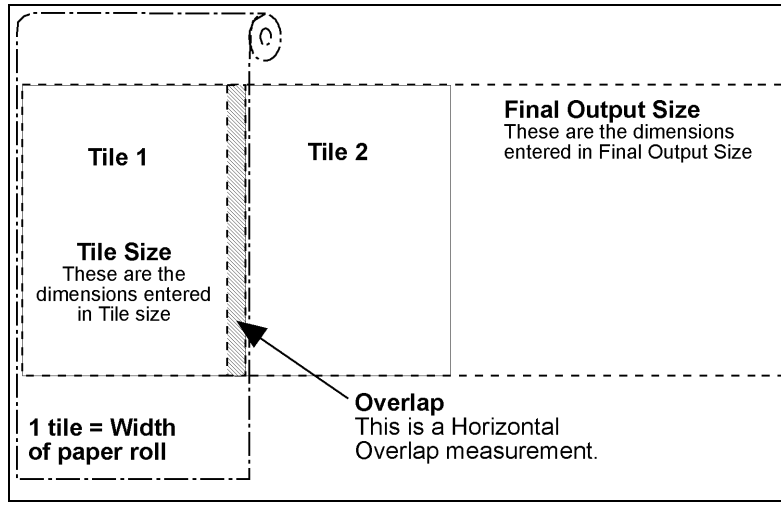
To specify a tile size either:

- Click on the down arrow in the edit box and choose from the drop-down list or
- Type the exact desired **Width** and **Height** of the tile size in the appropriate box. Press the **Tab** key to enter your values.

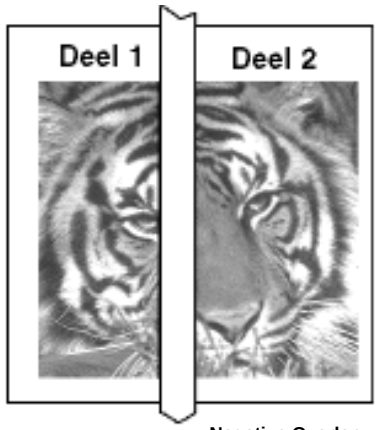
Check the **Land** checkbox to select Landscape mode for your tiles. Leaving this checkbox unchecked selects Portrait mode for the tiles.

You can also specify the horizontal and vertical amounts by which each tile will overlap the next by typing in values in the **H. Overlap** and **V. Overlap** edit boxes.

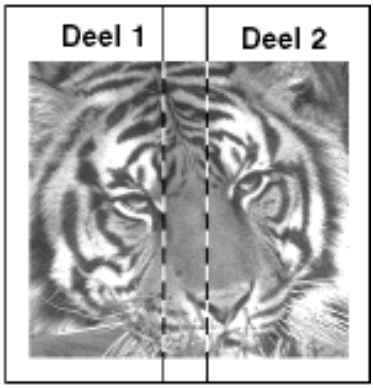
The following illustration shows which areas of your image relate to each edit box.


Tile 1
Tile 2
Final Output Size
These are the dimensions entered in Final Output Size
Tile Size
These are the dimensions entered in Tile size
Overlap
This is a Horizontal Overlap measurement.
1 tile = Width of paper roll

Both positive and negative overlaps can be specified in order to ensure better alignment when the tiles are physically assembled.



Negative Overlap
When a panel is cut in half by an obstacle such as a panel support, you may want the image to continue through the support. To do this, you would define a negative overlap.
i.e. -20 mm



Positive Overlap
When one tile (i.e. tile 1) is designed to butt up to another (i.e. tile 2), a positive overlap will print an extra amount on the edge of each tile to ensure a good alignment.
i.e. +20 mm

Cropping an image

Select the **Tile & Crop** tab. To visually adjust the cropping area, click and drag on the corners of the preview image.

To define a cropping area more precisely, check the **Select an area to crop** checkbox. You can then either choose from a drop-down list or type in the exact Width and Height of the cropped image.

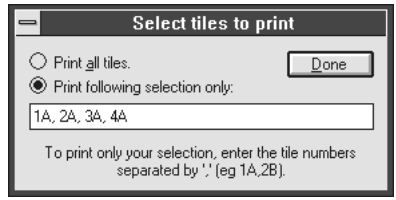
Check the **Land** checkbox to select Landscape mode for your cropping area. Leaving this checkbox unchecked selects Portrait mode for the cropping area.

Enter values in the **X Offset** and **Y Offset** edit boxes to offset the cropping area from the left and bottom edges of the image. (The origin **0, 0** for X and Y Offsets is the bottom left, as this is the PostScript standard.)

Press the **Tab** key to enter your values.

Printing tiles

Select the **Tile & Crop** tab. Click on the **Tiles...** button at the bottom of this tab. A 'Select tiles to print' dialog box will open.


Select tiles to print
Print all tiles.
Done
Print following selection only:
1A, 2A, 3A, 4A
To print only your selection, enter the tile numbers separated by ',' (eg 1A,2B).

Check the **Print all tiles** option when you wish to print all the tiles shown on the preview image.

When you wish to print only a few of the tiles, check the **Print following selection only** option and type in the appropriate tile numbers, separating each number with a comma. Tile numbers are displayed on the preview image inside each tile box. This selection is often used when you have already printed all the tiles and one is damaged.

Click on the **Done** button to save your selection of tiles to print and return to the Tile & Crop window.

When you are ready to print, click on the **OK** button at the bottom of the Tile & Crop window. An 'About to save changes' dialog box will open. This informs you that your settings will be written to a file called '<filename> from Tile & Crop' on your spool queue. Click on the **Yes** button to exit the Tile & Crop feature and create the file.

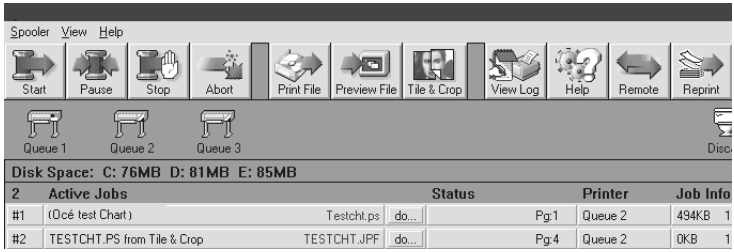
Your Tile & Crop file will appear in the Active Jobs list within the Océ Server main screen ready for you to print automatically or manually.

For example, suppose a PostScript file called TESTCHT.PS is loaded from the Active Jobs list into the tiling and cropping area of the Océ Server.

After tiling and cropping the image, click on the OK button at the bottom of the 'Tile & Crop' window to open the 'About to save changes' dialog box.

About to save changes
These settings will be written to
"TESTCHT.PS from Tile & Crop"
on your print queue.
You have selected 4 tiles to print out of 4 (total).
The size of the biggest tile is:
6.35 In. X 8.765 In.
including margins and any overlaps.
Exit and create file?
Yes
No

Click on the **Yes** button at the bottom of the 'About to save changes' dialog box to create a Tile & Crop file and restore the Server main screen. The Tile & Crop file appears in the Active Jobs list described as 'TESTCHT.PS from Tile & Crop'.

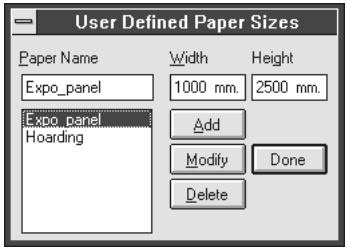


Tile & Crop files can also be identified by the file extension 'JPF'. In the illustration above, TESTCHT.PS is the original PostScript file. TESTCHT.JPF is the Tile & Crop file.

Note: *When you print your Tile & Crop file, make sure that the 'Use page positioning' checkbox in the Paper Sources tab in the Printer Setup: dialog box is not checked. This is because Tile and Crop performs its own page positioning.*

Setting custom paper sizes

Click on the **Sizes...**button on the **Tile & Crop** tab to design and store paper sizes that may not be contained in the standard drop down list. A 'User Defined Paper Sizes' dialog box will open.



Within this dialog box you can specify, modify and delete user-defined paper sizes. The dialog box will only show user-defined paper sizes, for example a paper size designed for tiles to fit the panels on an exhibition stand. Standard paper sizes cannot be edited.

▼ **To define a new paper size**

1. Type a unique name in the 'Paper name' edit box. This will be used to identify the new paper in the future.
2. Enter the width and height measurements of the new paper size in the 'Width' and 'Height' edit boxes.
3. Click on the **Add** button.
4. Click on the **Done** button.

Your new paper size will be available in the 'Tile size' and 'Select an area to crop' drop-down lists within the Tile & Crop tab.

▼ **To modify a paper size**

1. Scroll through the list beneath the 'Paper name' edit box and select the paper size you wish to modify.
2. Type a unique name in the 'Paper name' edit box. This will be used to identify the modified paper in the future.
3. Enter the width and height measurements to modify the paper size in the 'Width' and 'Height' edit boxes.
4. Click on the **Modify** button.
5. Click on the **Done** button.

▼ **To delete a paper size**

1. Scroll through the list below the 'Paper name' edit box and select the paper size you wish to delete.
2. Click on the **Delete** button.
3. Click on the **Done** button.

Editing a tile and crop file

To change the settings in a 'Tile and Crop' file in a spool queue, simply load the file into the tiling and cropping part of the Server.

Chapter 6
Monitoring status and log files

The Server main screen displays a variety of information to help you monitor the progress of your printing. It also produces log files containing the printing history of print jobs so you can analyze the Océ Server workload and performance. To help with your analysis, you can perform a variety of different operations on the log files. These operations include:

•Searching for the printing history of selected jobs
•Printing a condensed list of the printing history of selected jobs
•Printing a summary of the printing history of selected jobs

Server status

Viewing the current status of the server

The Océ Server has a Status Bar across the bottom of the main screen.

When you start the Océ Server, the right-hand section of the Status Bar will display whether the interpreter is in banding or non-banding mode, and whether the default spool queue (the first Print Queue Icon) is setup for an RGB, CMYK, or monochrome color space.

Throughout the printing process, this section of the Bar will keep you informed of the status of the interpreter with messages such as: 'Interpreting', 'Error', 'Aborted', 'Sending to Printer', etc. It will also display special driver information, such as 'Press F4 to Pause'. These messages are often driver-specific and the ones you see will depend upon the device you are driving.

The left side of the Status Bar displays the three 'Busy', 'Spooler' and 'Error' buttons. These buttons are normally green.

When the Océ Server is busy processing a job, the **Busy** button will turn yellow. Click on the **Busy** button when it is yellow to cancel the current processing activity. (This has the same effect as clicking on the **Abort Print** button on the Océ Server Button Bar.)

When the Océ Server spooler has been started, the **Spooler** button on the Status Bar will turn yellow to show that the spooler is active and that jobs in the Active Jobs List are printing.

When there is an error in interpreting a job the **Error** button on the Status Bar will turn red. Click on the **Error** button when it is red to display error information.

Viewing the current status of a job being printed

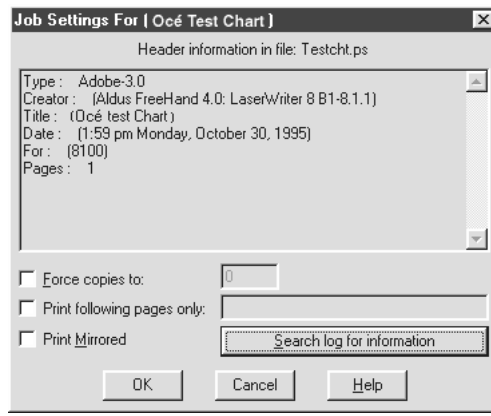
When a job is being printed, a Job Information Bar appears just above the Active Job List.

This bar displays the job's PostScript filename, which copy of total set of copies is currently printing (if marked as a **?,** the copies command is at the end of the PostScript file and will not show until interpretation is complete), which page of total set of pages is currently printing, and small page icons to help you see at a glance which page is printing and how many pages you have left.

Changing settings for an individual print job

Click on the **do...** button for the individual job and select **Change Settings** from the drop-down menu of options. Any settings made with this option are specific to the individual job associated with the do.. button you click on.

Select **Change Settings** to open the 'Job Settings For' dialog box. The box shows all the header information for that job and allows you to make three job-specific settings.



To specify the number of copies to be printed Check the **Force copies to:** checkbox and type the number of copies required in the edit box. The setting you make here will override the copies command in a PostScript file.

To print a selection of pages If you have a multi-page document you may wish to print only a selection of those pages. To do this, check the **Print following pages only** checkbox and then enter the required page numbers in the edit box.

-To print a range of pages, type in the first page number followed by two dots and then the last page number. Example: Typing 1..7 will print pages 1 to 7.

-To enter a single specific page, type in the page number.

- To enter several specific pages, type in each page number separated by a comma. Example: Typing in 15, 17, 23 will print pages 15 and 17 and 23.

Note: *This also applies when previewing a selection of pages.*

To make the job print mirrored Check the **Print Mirrored** checkbox.

Click on the **OK** button at the bottom of the Job Settings For dialog box to save your settings and return to the Océ Server main screen. The Océ Server will apply the settings when you print the job.

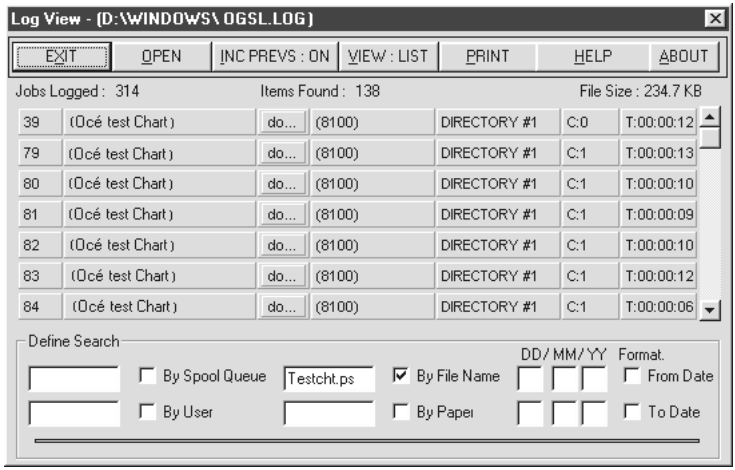
Viewing printing histories

Use the Log View dialog box to view the log files that the Server produces. To open the Log View dialog box you can either:

Click on the **View Log** button on the Océ Server Button Bar.

or

Click on the **Search log for information** button in the Job Settings For dialog box.


Log View - (D:\WINDOWS\ OGSL.LOG)
EXIT
OPEN
INC PREVS : ON
VIEW : LIST
PRINT
HELP
ABOUT
Jobs Logged : 314
Items Found : 138
File Size : 234.7 KB
39 (Océ test Chart) do... (8100) DIRECTORY #1 C:0 T:00:00:12
79 (Océ test Chart) do... (8100) DIRECTORY #1 C:1 T:00:00:13
80 (Océ test Chart) do... (8100) DIRECTORY #1 C:1 T:00:00:10
81 (Océ test Chart) do... (8100) DIRECTORY #1 C:1 T:00:00:09
82 (Océ test Chart) do... (8100) DIRECTORY #1 C:1 T:00:00:10
83 (Océ test Chart) do... (8100) DIRECTORY #1 C:1 T:00:00:12
84 (Océ test Chart) do... (8100) DIRECTORY #1 C:1 T:00:00:06
Define Search
DD/ MM/ YY Format.
By Spool Queue
Testcht.ps
By File Name
From Date
By User
By Paper
To Date

There is a **VIEW:** button in the middle of the Button Bar across the top of the Log View dialog box. When this button is captioned **VIEW: LIST**, the middle section of the dialog box shows a complete list of the selected job logs which match the search requirements. For example, the illustration above shows a **VIEW: LIST** resulting from a search by file name for a file called 'Testcht.ps'. The scroll bar on the right side of the list enables you to scroll through the complete list.

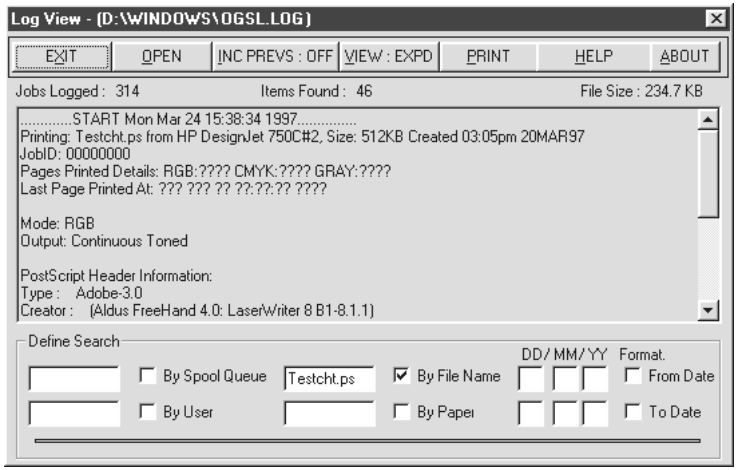
The Log View dialog box operates in a manner similar to a standard Windows dialog box. The job print histories (logs) show:

- The title of the job
- The user who printed the job
- The queue on which it was processed
- The number of pages printed
- The time taken to complete the job

If a job log is highlighted in red, it has either been interrupted or has produced error messages that were recorded in the log file. Otherwise, if you click on a job log to select it, it will be highlighted in green.

You can expand the list view of the job logs to view the complete log information for a specific job. There are three ways to do this:

- Double click on an individual job log in the list.
- If a job log is highlighted in green, click on the **VIEW:** button on the Océ Server Button Bar.
- Click on the **do...** button for an individual job log and select **Expand Job Information** from the drop-down menu.

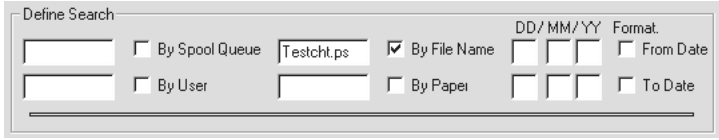


The **VIEW:** button on the Océ Server Button Bar will then be captioned VIEW: EXPD. To restore the view from expanded mode to list mode, simply click on the **VIEW:** button.

Note: *When you click on the* **do...** *button for an individual job log, the second option on the drop-down menu is* **Copy Job To Clipboard**. *Select this option to copy the complete job log information for that specific job to the clipboard.*

Searching for specific printing histories

You can use searches to identify an individual job or groups of jobs as required. The search options are displayed in the **Define Search** section across the bottom of the Log View dialog box.



To define a search, type a search string in the appropriate edit box and press the **Enter** key. Search strings can be up to 254 characters long. To activate the search, click on the appropriate checkbox. A checkmark appears in the checkbox to show the search has been activated.

For example, in the illustration above a simple search has been activated for the PostScript job called 'Testcht.ps'.

Search by Spool Queue This searches for all jobs matching the spool queue name entered in the **By Spool Queue** edit box.

Search by User This searches for all jobs matching the user name entered in the **By User** edit box.

Search by Filename This searches for all jobs matching the name entered in the **By File Name** edit box. If the log for the individual job does not contain a filename, Log View will try to match the DOS filename of the job with the name entered in the 'By File Name' edit box.

Search by Paper This searches for all jobs matching the paper name entered in the **By Paper** edit box.

Search from Date This searches for all jobs that were spooled after and including the dates entered in the **From Date** edit boxes.

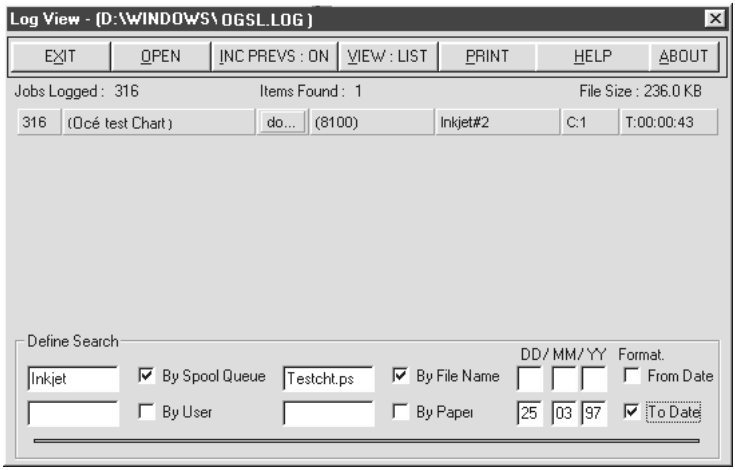
Search to Date This searches for all jobs that were spooled before and including the dates entered in the **To Date** edit boxes.

Note: *Epilogue job logs are ignored by all of the searches.*

The real value of the Log View searches is the ability to activate compound searches. This enables you to define more precisely the job or group of jobs for which you are seeking information.

Suppose, for example, that you wish to search for information on a job with the filename TESTCHT.PS, printed to an inkjet printer on spool queue number two, on or before the 25th of March 1997.

You would enter the search details as shown below:

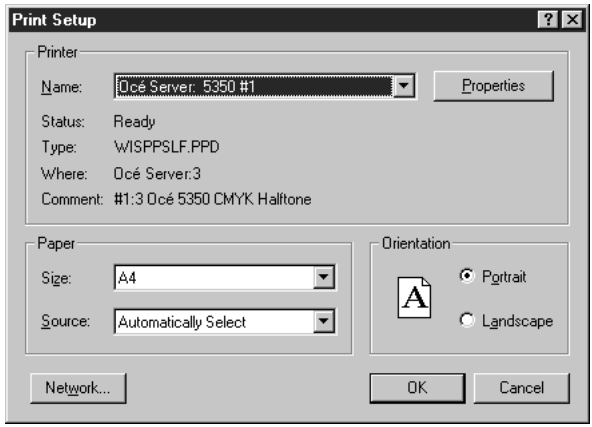


Two points to remember when defining searches:

- Searches are not case-sensitive. This means you can type in your search string in either UPPER CASE, or lower case, or in a Combination of the two.
- Partial search strings are allowed. This means you can type in part of a name in a search edit box (e.g. 'Inkjet' instead of 'Inkjet Queue 2') in the 'By Spool Queue' edit box. In this case, Log View will match any spool queue which contains the string 'Inkjet'.

Printing search results

To print the results of a search, click on the **PRINT** button on the Log View Button Bar. The Print Setup dialog window will appear.



Select the printer to use, the paper size for your printout, the paper source and portrait or landscape orientation. Click on the **Properties** button if you wish to specify other options, such as multiple copies.

The details shown in the printed log file will depend upon the width of the paper used. More details will be shown if the paper is wide enough to accommodate them.

A summary of the jobs is also given. This includes the number of copies for particular paper sizes and the total number of copies for certain spool queues.

Including previewed jobs in searches

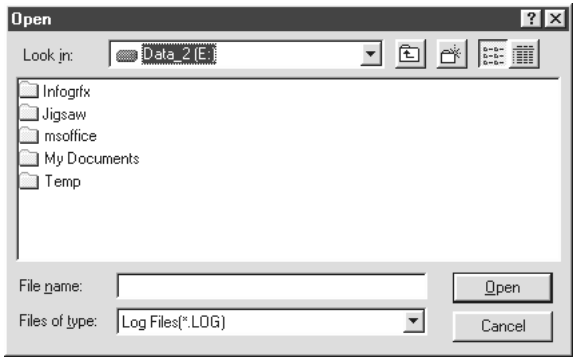
You can use the INC_PREVS: button on the Log View Button Bar to specify whether previewed jobs should be included in your searches.

When the button is captioned INC_PREVS: ON, previewed jobs will be included. When the button is captioned INC_PREVS: OFF, previewed jobs will not be included. Click the button to toggle between INC_PREVS:OFF and INC_PREVS:ON.

Each time you click the INC-PREVS: button, Log View performs a new search to make sure that the selected jobs correctly match the search requirements.

Searching for printing histories on your system

If the job log file you wish to view is stored on your system, rather than being held in a current spool queue, you can still select and load the file by clicking on the **OPEN** button on the Log View Button Bar. When you click on the **OPEN** button, the Open dialog window will appear.



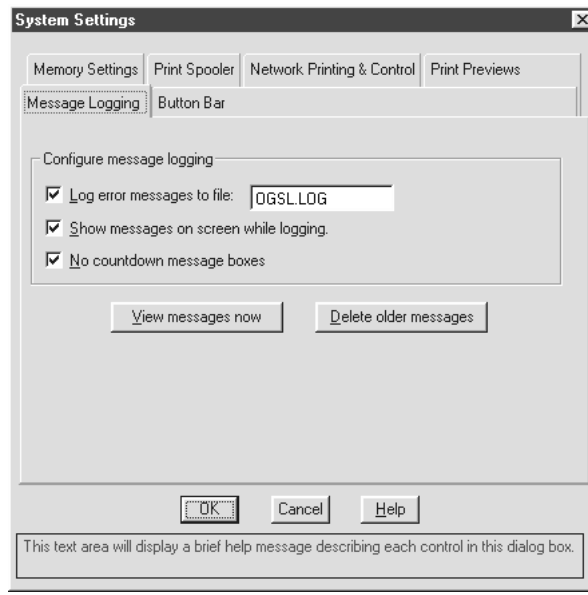
Within this window you can select and open a valid job log file, i.e. a file containing a job log with the filename extension '.LOG'. Clicking on the Open button within the Open dialog window loads the selected log file into Log View.

When the job log file is loaded, it will be searched according to the search options currently defined and activated within the 'Define Search' section of the Log View dialog box. To carry out a different search on the loaded file, simply specify new searches by entering or amending search strings in the appropriate edit boxes and clicking on the appropriate checkboxes to check or uncheck them.

Note: *Click on the* **EXIT** *button on the Log View Button Bar to close the Log View dialog box and return to the Server main screen.*

Creating log files and setting options

1. Click on the **Settings** icon and select **Properties...** from the drop-down menu to open the System Settings dialog box.
2. Click on the Message Logging tab.



The name of the current log file is displayed in the edit box in the 'Configure message logging' section of this tab. (The Server default setting is for a log file named WISPPS.LOG, located within the WINDOWS folder on your system.)

To create a new log file, enter the path and a name for the file in the edit box. When you click on the **OK** button at the bottom of the System Settings dialog box, your settings will be saved and your new log file will become the current log file.

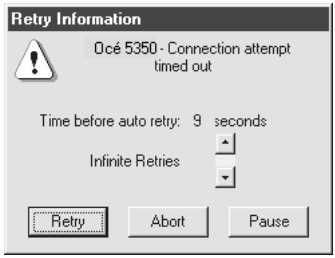
Click on the **View messages now** button to open the Log View dialog box.

Click on the **Delete older messages** button to delete the contents of the current log file.

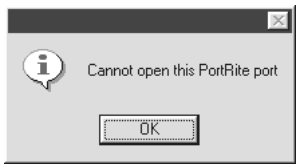
Check the **Log error messages to file** option to cause the Océ Server to record error information as well as job information in the log file.

Use the **Show messages on screen while logging** option and the **No countdown message boxes** option to specify the action taken by the Server when a print job error occurs.

If you check the **Show messages on screen while logging option** and leave the **No countdown message boxes** unchecked, a Retry dialog box will be displayed on screen and a timer will be set. If there is an error, the Océ Server will automatically try to resend until the timer reaches zero before continuing with the next job. An alarm sounds while the Retry dialog box is displayed and you can pause the Océ Server by clicking on the **Pause** button in the dialog box.



If you check both the **Show messages on screen while logging** and the **No countdown message boxes** options, a warning dialog box will be displayed on screen if there is an error. You will then need to click on **OK** in the warning dialog box before the Océ Server will continue with the next job.



Leaving both the **Show messages on screen while logging** and the **No countdown message boxes** options unchecked means the job will produce an error and Océ Server will continue with the next job. No warning dialog boxes will be displayed on screen.

Chapter 7
Using the Remote RIP Software

This chapter describes how to set up and use the Océ Graphics Remote RIP software on client workstations. The Océ Server Remote RIP Server runs under the Windows NT Server 4.0 operating system. Remote RIP Clients can be set up on workstations running under the Windows 95, Windows NT or Apple Macintosh operating systems.

General Features

What does Remote RIP Client enable me to do?

Running the **Océ Server Remote RIP Client** on your workstation enables you to access the Server main screen from your workstation. If you are a **Guest User,** you can view the Server main screen to see where your job is in a print queue, for example, or if it has been printed. You can also add a file to a print queue. If you are a **Power User**, you have greater access rights. You can not only view the Océ Server main screen and add a file to a print queue, but also manipulate jobs in the print queues and change settings to specify the way in which your individual jobs are printed.

What does Remote RIP Server enable me to do?

Running the **Océ Server Remote RIP Server** on your workstation enables you to control the Remote RIP Clients from your workstation. The Remote RIP Server shows you which Client workstations are currently connected. You can select an individual Client workstation and send a message to it ir to disconnect it. You also have global options to broadcast a message to all the Client workstations or to disconnect them all. For example, you can use the global options to warn all Client workstations that the Server is about to be closed down before you disconnect them.

Note: *Most important in terms of control, you set the Administrator password and the Power User password within the Océ Server Remote RIP Server Window.*

Initially, all users at Remote RIP Client workstations log on as Guest Users. Setting a Power User password then enables users who know the password to log on as Power Users and have greater access rights with respect to the Server main screen. Setting or changing the Power User password first requires entry of the correct Administrator password, providing an additional level of security.

Using Remote RIP Server software

The Océ Server Remote RIP Server is very simple to operate.

First, you must start the Server, and set the Administrator and the Power User passwords. Then, you can explore the facilities for seeing which Client workstations are currently connected, how to send messages, how to disconnect Client workstations and how to stop the Server.

Starting the Océ Server Remote RIP Server

You can start the Remote RIP Server manually or automatically.

▼ **To start manually from inside the Server**

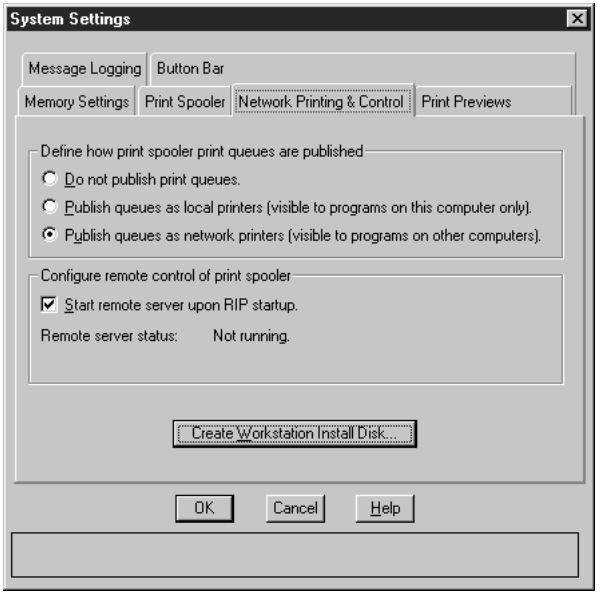
Click on the Remote button in the Océ Server button bar.

The Remote RIP Window initializes and opens on your screen.

▼ **To start automatically**

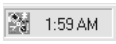
1 Click on the **Settings** icon in the Server main screen and select **Properties…** from the drop-down menu.
The System Settings dialog box will open.

2 Select the **Network Printing & Control** tab.


System Settings
Message Logging
Button Bar
Memory Settings
Print Spooler
Network Printing & Control
Print Previews
Define how print spooler print queues are published
Do not publish print queues.
Publish queues as local printers (visible to programs on this computer only).
Publish queues as network printers (visible to programs on other computers).
Configure remote control of print spooler
Start remote server upon RIP startup.
Remote server status: Not running.
Create Workstation Install Disk...
OK
Cancel
Help

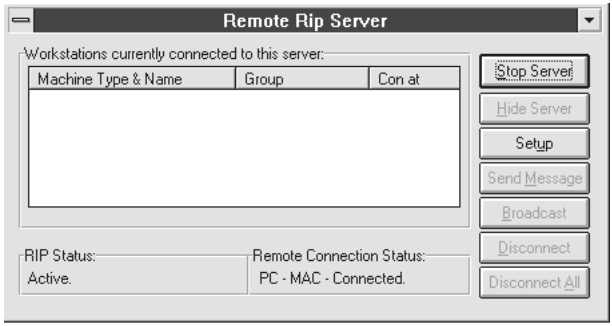
Check the **Start remote server upon RIP startup** checkbox to automatically start the Remote RIP Server whenever you start the Océ Server.

The Remote RIP Server icon will be displayed on the right side of the Windows taskbar at the bottom of your screen.



Double-click on the Remote RIP Server icon in the taskbar.

The Remote RIP Server Window will open on your screen.



RIP Status While the Remote RIP Server is connecting to the Océ Server running on your system, the message 'Searching for RIP' is displayed.When the connection is made, the message 'Active' is displayed.

If the Remote RIP Server cannot make the connection, for example, if the Océ Server is not running, the message 'Searching for RIP' remains displayed.

Remote Connection Status The Remote Connection Status: message indicates successful network connections and which type of Remote RIP Clients it is available for.

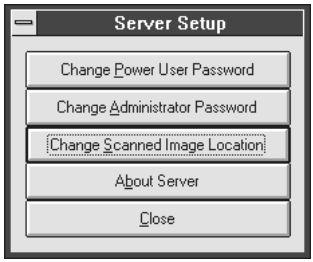
For example, the message 'PC - Connected' means that the Server has made successful network connections and is available for Remote RIP Clients on workstations running under the Windows 95/NT operating systems. The message 'MAC - Connected' means the Server is available for Macintosh Client workstations, and the message 'PC - MAC - Connected' means the Server is available for both PC and Macintosh Client workstations.

An error message is displayed if the Server fails to connect to the network.

Setting the Administrator and the Power User passwords

When the Océ Server Remote RIP Server is first installed, '**quasar**' is set as both the Administrator and the Power User password. Set your own passwords to replace '**quasar**'. You have to set the **Administrator** password before you can set the **Power User** password.

Select the **Setup** button on the right side of the Remote RIP Server Window.
The **Server Setup** dialog box will open.



▼ **To set the Administrator password**

1 Select the Change Administrator Password button.
The Change Administrator Password dialog box will open.

2 Type in **quasar** as the **Administrator Password** and press the **TAB** key.
If the Administrator password is entered incorrectly, e.g. in UPPER CASE instead of in lower case, a prompt window will inform you that the password is incorrect.

Click on **OK** in the prompt window to close the window and reposition the cursor in the **Administrator Password** edit box.

Type in the correct password and press the **TAB** key to position the cursor in the **New Administrator Password** edit box.

3 Type in your new administrator password (maximum 20 characters), and press the **TAB** key to position the cursor in the **Verify Administrator Password** edit box.
4 Type in your new Administrator password again to verify it.
5 Select the **OK** button to close the Change Administrator Password dialog box. The new Administrator password you entered and verified will take effect immediately.

▼ **To set your own Power User password**

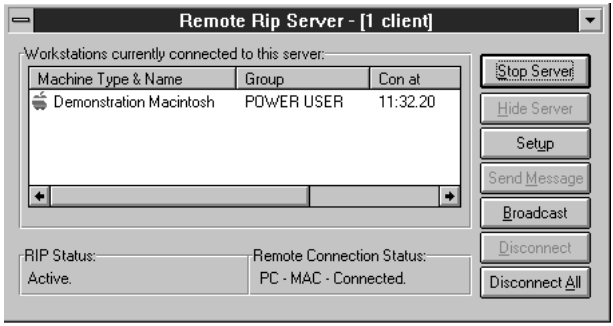
1 Select the **Change Power User Password** button on the Server Setup dialog box.
The Change Power User Password dialog box will open.

2 The Change Power User Password dialog box operates in the same way as the Change Administrator Password dialog box.
The requirement that you enter the correct Administrator password before the Power User password can be changed provides an additional level of security.

Note: *When you have set your own Administrator password and Power User password, select the* **Close** *button to exit the Server Setup dialog box.*

Client workstations currently connected

Client workstations are listed in the middle section of the Remote RIP Server Window when they connect to the Server.

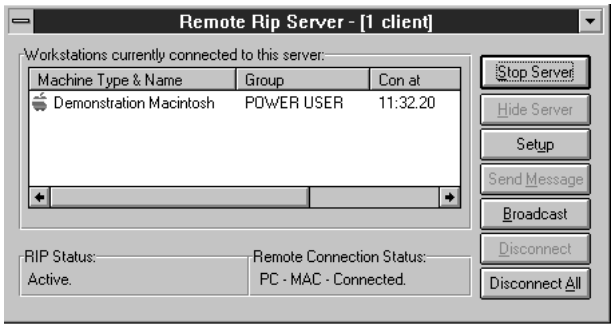


Sending messages to Client workstations

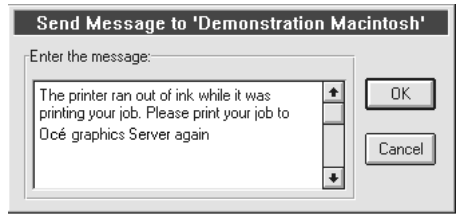
You can send a message to an individual Client workstation that is currently connected, or you can broadcast a message to all currently connected Client workstations.

▼ **Sending a message to an individual Client workstation**

Select the individual Client workstation in the list in the 'Workstations currently connected to this server:' section of the Remote RIP Server Window.



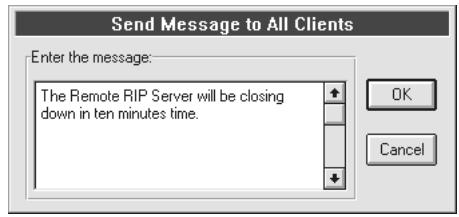
Select a Client workstation in the list to activate the **Send Message** button on the right side of the Remote RIP Server Window. Click on the Send Message button to open the Send Message to <Client name> dialog box.


Send Message to 'Demonstration Macintosh'
Enter the message:
The printer ran out of ink while it was printing your job. Please print your job to Océ graphics Server again
OK
Cancel

Type in your message and click on the **OK** button.Your message will be displayed on screen at the Client workstation. The user at the Client workstation will need to select an OK prompt in order to close the message on the screen. For example:

▼ **Broadcasting a message to all Clients**

Click on the **Broadcast** button on the right side of the Remote RIP Server Window. The Send Message to All Clients dialog box will open.



Type in your broadcast message and click on the **OK** button.

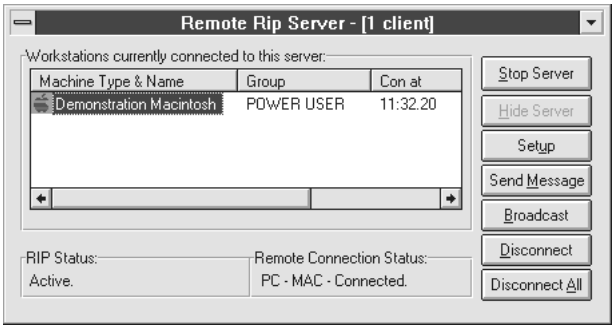
Your message will be displayed on screen at all Client workstations currently connected. As before, the message display includes an OK prompt for users to select in order to close the broadcast message on their screen.

Disconnecting Client workstations

You can select and disconnect an individual Client workstation, or disconnect all the Client workstations.

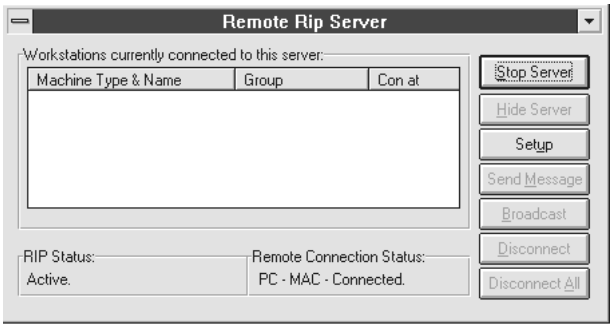
▼ **Disconnecting an individual Client workstation**

Select the individual Client workstation in the list in the 'Workstations currently connected to this server:' section of the Remote RIP Server Window.



Select a Client workstation in the list to activate the **Disconnect** button on the right side of the Remote RIP Server Window. Click on the **Disconnect** button to disconnect the selected Client from the Server.

Once disconnected, the Client details no longer appear in the Remote RIP Server Window.



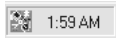
At the Client workstation, a ** Disconnected ** message is displayed in the status bar at the bottom right side of the Remote Client Window and the Title Bar across the top of the Window changes to state 'No Connection'.

▼ **Disconnecting all Clients currently connected**

Click on the **Disconnect All** button on the right side of the Remote RIP Server Window.

Hide Server option

Click on the **Hide Server** button to close the Remote RIP Server Window on screen and instead display the Remote RIP Server icon on the right side of the Windows taskbar at the bottom of your screen.



The Océ Server Remote RIP Server continues to run on your system when 'hidden' in this way.

Double-click on the Remote RIP Server icon in the taskbar to reopen the Server Window on screen.

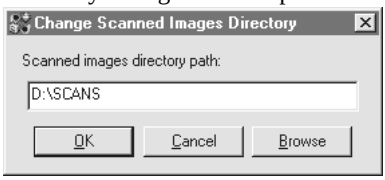
Change Scanned Image Location option

This option is primarily for use when your output device is a color laser copier, for example, with scanning facilities. It enables you to specify a path and directory where the scanned images are stored. All Remote RIP Clients, whether they are logged on as Guest Users or Power Users, can then access the specified directory of scanned images.

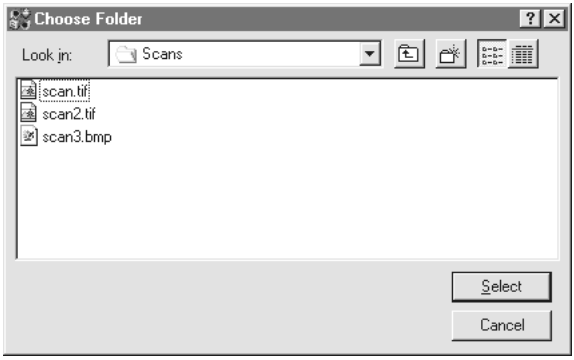
If you are running Remote RIP and the Server, the option is disabled by default. To enable the option, please refer to the section on Command Line Switches in the Reference Manual. If you are running Remote RIP and the Server, this option becomes available by default.

To select the option when it is available, click on the **Setup** button on the right side of the Remote RIP Server Window. Select **Change Scanned Image**

Location from the Server Setup dialog box. The Change Scanned Images Directory dialog box will open.



Position the cursor in the edit box beneath the 'Scanned images directory path:' prompt to type in the path and directory where the files containing your scanned images are stored. Or if you prefer, click on the **Browse** button in the Change Scanned Images Directory dialog box. The Choose Folder dialog box will open, within which you can locate and select the directory.



Select the directory to return you to the Change Scanned Images Directory dialog box. Click on the **OK** button to confirm the directory and path for the scanned image files. Click on **Close** to close the Server Setup dialog box.

When remote RIP Clients are connected to the Server, they will be able to select and retrieve files from the specified directory via an Images option in their main menu.

Stopping the Server

Click on the Stop Server button on the right side of the Remote RIP Server Window.

First, the message 'Removing Connections…' will be displayed in the Remote Connection Status: section of the Server Window, followed by the message 'Killing Server…'.

The Remote RIP Server Window will automatically close when the Server is stopped.

Using Remote RIP Client software

The Océ Server Remote RIP Client enables you to access the Océ Server main screen in a Remote Client Window at your workstation. This is particularly useful when you wish to add a file to an Océ Server print queue, as you can simply drag and drop the file into the Remote Client Window, or, in the case of an Apple Macintosh workstation, drop the file onto the Remote RIP Client icon.

What you can see and do within the Remote client window depends upon whether you are a Guest User or a Power User.

Opening the Server Remote Client Window

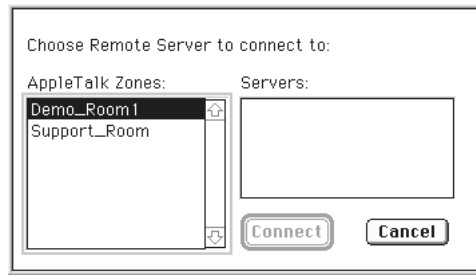
If your computer is running under Windows 95 or Windows NT Version 4.0, click on the **Start** menu and select **Programs**.

If your computer is running under Windows NT Version 3.51, select the **Client** entry in **Program Manager**.

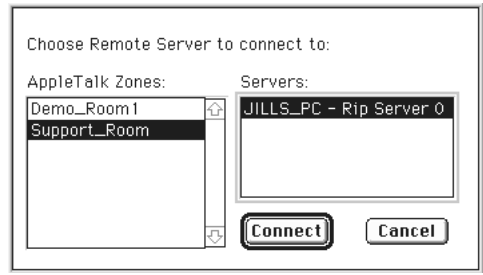
If you are working on an Apple Macintosh computer, select the **Remote RIP Client** icon on your desktop.

The Remote RIP Client will search for the last Remote RIP Server running on your system to which it was connected. The Remote Client Window will open. However, if there was no previous Server connection, Remote RIP Client cannot display the Océ Server main screen within the Window.

Therefore, the first time you select the Remote RIP Client entry after installing the software, a dialog box opens asking for the choice of a Remote Server.

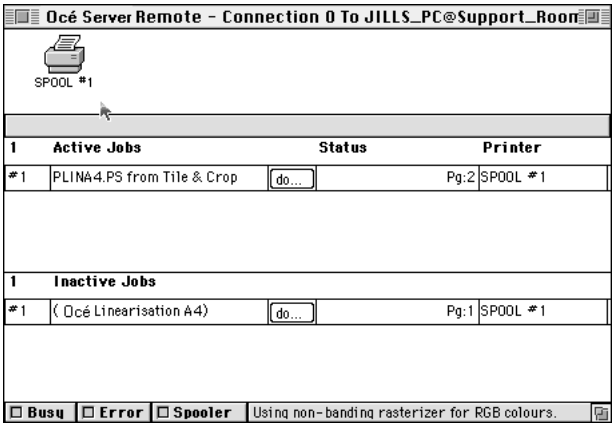


Select the Server to enable the Connect button.



Click on the **Connect** button to connect to the Remote Server selected and close the dialog box.

Once the connection is made with the Remote Server, the Remote Client Window will display the Océ Server main screen.



When the Remote Client Window is active, you can access the dialog box to choose a Remote Server to connect to by selecting **File** from the main menu, and then selecting the **Connect to Server…** option. The options to **Reconnect Last** (i.e. reconnect to the last Remote RIP Server running on your system to which you were connected), **Disconnect** (i.e. disconnect from the Remote RIP Server you are currently connected to) and **Quit/Exit** are also available under File.

Note: *The first time the Remote Client Window is opened on a workstation, you are automatically logged on as a Guest User.*

What can I do as a Guest User?

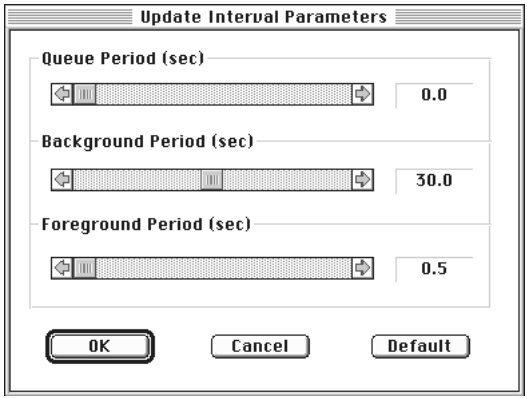
View the printing situation By viewing the Océ Server main screen in your Remote Client Window, you can see the current printing situation across the network. For example, you can look at the Active and Inactive Jobs Lists and see how busy the print queues are, the position of your job(s) within one or more queues and whether any of your jobs have been printed.

To ensure you are always viewing the current situation, select **View** from the Remote RIP Client main menu.

View offers you a drop-down list of options to **Update Queues, Update Queue Names**, and **Update RIP Status**. When you select one of these options, the update is performed immediately.

Set Automatic updates on an Apple Macintosh Client workstation When you are running the Océ Server Remote RIP Client on an Apple Macintosh workstation, you can set time intervals for your Remote Client Window to be automatically updated.

Select **Updates** from the Remote RIP Client main menu and then the **Modify Update Intervals** option. The Update Interval Parameters dialog box will open.



Set the Queue Period This sets the time interval for Remote RIP Client to check the Océ Server print queue and display it in your Remote Client Window.

For example: When the Queue Period is set to 0.0 seconds, Remote RIP Client will continuously check the Server print queue and continuously update your Remote Client Window to display the current print queue situation.

This setting applies whether you are running Remote RIP Client in the background or in the foreground on your system.

Set the Background Period This setting applies when you are running Remote RIP Client in the background on your Apple Macintosh, i.e. the Remote Client Window is open but is not selected as the currently active window. The setting specifies how often Remote RIP Client will check the Océ Server and completely update your Remote Client Window.

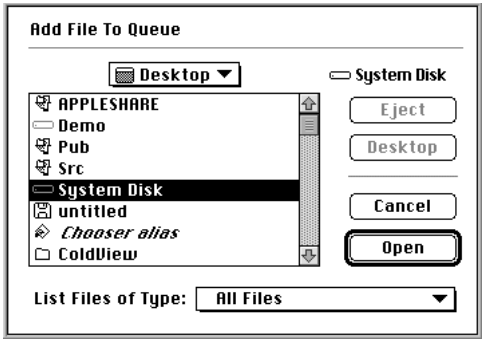
For example: A setting of 30.0 means that when you are running Remote RIP Client in the background, Remote RIP Client will check the Server and completely update your Remote Client Window every 30 seconds.

Foreground Period This setting applies when you are running Remote RIP Client in the foreground on your Apple Macintosh, i.e. the Remote Client Window is both open and selected as the currently active window. Again, the setting specifies how often Remote RIP Client will check the Océ Server and completely update your Remote Client Window.

For example: A setting of 0,5 means that when you are running Remote RIP Client in the foreground, Remote RIP Client will check the Server and completely update your Remote Client Window every half second.

Add a file to a print queue There are two ways to add a printable file stored elsewhere on your system to a print queue.

The Print Queue icon method Click on the Print Queue icon representing the print queue you wish to add a file to, and the option Add File To Queue... will be displayed. Select this option to open the Add File To Queue dialog box within which you can locate your file and add it to the queue.

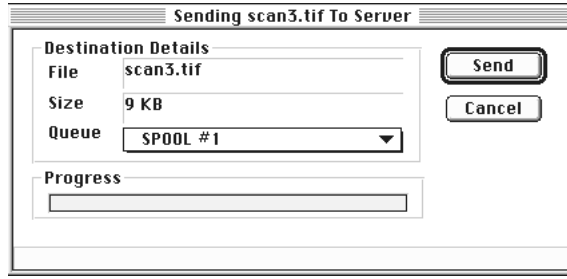


The drag and drop method Locate the file you wish to add to a print queue.

If you are running Remote RIP Client under Windows 95 or Windows NT, drag the file and drop it in your Remote Client Window.

If you are running Remote RIP Client on an Apple Macintosh workstation, drag the file and drop it on the Remote RIP Client icon. (You may find it convenient to create an alias for this icon on your desktop for this purpose.)

The Send <filename> To Server window will open.

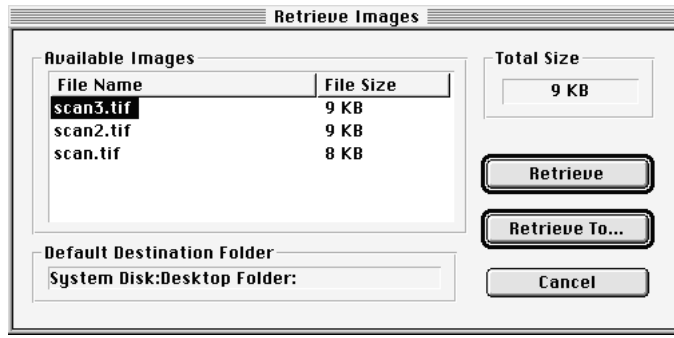


Select the print queue you wish to send your file to from the list box beside the 'Queue' prompt in the 'Destination Details' section of the Send <filename> To Server window. Then click on the Send button. When your file has been transferred, the title of the Send button will change to '**Complete**'. Click on Complete to close the Send <filename> To Server window and return to your Remote Client Window.

The Active Jobs List displays your file.

Retrieve files of scanned images from the Server A path and directory where files of scanned images are stored can be specified at the Remote RIP Server. An example would be images scanned on a color laser copier. When a directory has been specified, you will see the item 'Images' in your main menu and you can access and retrieve the files in the specified directory.

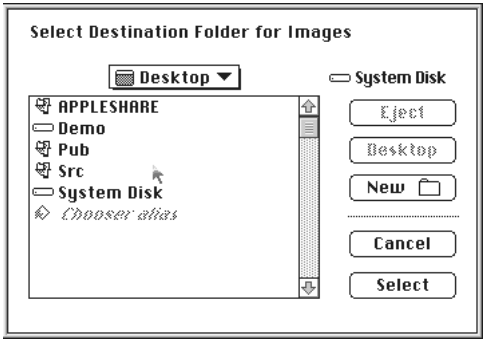
Click on **Images** in the main menu and select the **Retrieve Images** option. The Retrieve Images dialog box will open.



This dialog box lists all the files in the specified directory. Click on a file to select it and enable the 'Retrieve' and 'Retrieve To…' buttons. (Hold down the **SHIFT** key and click to select several files in the list.)

Click on the **Retrieve** button to place the selected file(s) in the Default Destination Folder, displayed in the bottom left corner of the Retrieve Images dialog box. It is the location from which Remote RIP Client starts. During the retrieval process, a 'File Transfer in Progress:' message box appears on your screen.

If you prefer, click on the **Retrieve To...** button to open a window within which you can select a destination folder.



Again, during the retrieval process, the 'File Transfer in Progress:' message box appears on your screen.

After retrieval, click on the **Cancel** button in the Retrieve Images dialog box to close this box and return to the Remote Client Window. Your selected file(s) can now be processed in the specified destination folder.

Logging on as a Power User

Select **Access** from the Remote RIP Client main menu, and then the **Change Access** option. The Request Access dialog box will open.

Check the radio button on the left side of the 'Power User' prompt and type in the Power User password. Click on the **OK** button at the bottom of the dialog box.

If you type in the Power User password incorrectly, clicking on the **OK** button displays a Password Warning window prompting you to try entering the password again.

When you enter the correct Power User password, the Request Access dialog box will close and return you to the Remote Client Window logged on as a Power User.

If Remote RIP Client was last run on a workstation with a Power User logged on, the next time Remote RIP Client is started the Request Access dialog box will open.

To enable Remote RIP Client to continue, you must either enter the Power User password to log on again as a Power User, or check the radio button beside the 'Guest' prompt to log on as a Guest User.

What can I do as a Power User?

As a Power User you can do everything a Guest User can do, but you also have increased access rights to the Server main screen displayed in your Remote Client Window.

Control the Server Spooler When you are logged on as a Power User, the Spooler entry in the Remote RIP Client main menu is enabled.

Select **Spooler** to **Start** and **Stop** the Server spooler or to **Abort** the current print job.

Manipulate jobs in the print queues You can select and deselect a single job or several jobs at a time from the Active and Inactive Job Lists. Selected jobs are highlighted on screen and, once selected, can be moved around.

▼ **To select jobs**

- Click on the job to select a single job
- Click and drag across the jobs to select two or more adjacent jobs
- Hold down the [Ctrl] key and click on each job to select two or more non-adjacent jobs
- To deselect jobs, position the cursor outside the list where the job or jobs are located and click

To move jobs around To move jobs around, simply drag and drop them.

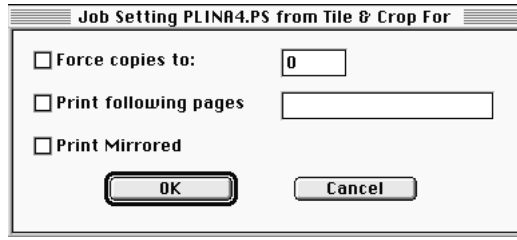
In this way you can move jobs between the Active and Inactive Job lists and move them to the top or to the bottom of either list.

Print individual jobs Select the job you wish to print by clicking on it, then drag and drop the job onto the Print Queue icon representing the printer you want to print the file to.

Alternatively, click on the **do...** button beside the name of the job you wish to print and select **Print File** from the **do...** button drop-down menu.

Change settings for individual print jobs Before printing an individual job, you may wish to change the settings, for example, to make the job print mirrored.

Click on the **do...** button beside the name of the job whose settings you wish to change and select Change Settings... from the **do...** button drop-down menu. The Job Settings dialog box will open.



Delete jobs from a print queue Click on the **do...** button beside the name of the job you wish to delete and select **Delete File From Queue...** from the **do...** button drop-down menu.

Appendix A
Miscellaneous

How to read this manual

The consistent style that is used in this manual enables you to quickly become familiar with the use of this manual and ultimately the Océ Graphics Server L.

Description Each section or subsection contains a description of the feature or operation identified in the title. It might also include possible applications, as well as any guidelines that you should bear in mind.

Procedures A description is followed by a procedure. A procedure always begins with a phrase which briefly describes the procedure, followed by a series of numbered steps that take you, step by step, through all phases of performing the operation.

Figures and tables Figures and tables are titled and numbered sequentially throughout this manual. Figures include pictures of product components, screen dumps, examples, and diagrams of concepts discussed in the description.

Attention getters There are several types of information to which we draw your attention. This information is classified as follows:

Note: *In a 'Note', information is given about matters which ensure the proper functioning of the machine or application, but useful advice concerning its operation may also be given.*

Attention: *The information that follows 'Attention' is given to avoid damage to your copy or original, the copier or printer, data files, etc.*

Caution: *The information that follows 'Caution' is given to prevent you suffering personal injury. .*

User survey

Did you find this manual to be accurate?

- ❑ Yes
- ❑ No

Were you able to operate the product after reading this manual?

- ❑ Yes
- ❑ No

Does this manual provide adequate background information?

- ❑ Yes
- ❑ No

Is the format of this manual convenient in size, easy to read and layed out well?

- ❑ Yes
- ❑ No

Did you find the information you were looking for?

- ❑ Always
- ❑ Most of the times
- ❑ Sometimes
- ❑ Not at all

How did you find the information you were looking for?

- ❑ Table of contents
- ❑ Index
- ❑ Neither

Are you satisfied with this manual?

- ❑ Yes
- ❑ No

Thank you for evaluating this manual.
If you have any other comments or concerns, please explain them on the following page.

7055891

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Océ-Technologies B.V.
Attn: ITC-User Documentation
P.O. Box 101
5900 MA Venlo
The Netherlands

Addresses of local Océ organizations

Océ-Australia Ltd.
P.O.Box 363
Ferntree Gully MDC VIC 3165
Australia

Océ-Österreich GmbH
Postfach 95
1233 Vienna
Austria

Océ-Belgium N.V./S.A.
Avenue J.Bordetlaan 32
1140 Brussels
Belgium

Océ-Brasil Comércio e Industria Ltda.
Caixa Postal 3187
01060-970 Sao Paulo, SP
Brazil

Océ-Canada Inc.
525, Logan Avenue,
Toronto, Ontario M4K 3B3
Canada

Océ Office Equipment (Beijing) Co Ltd.
Xu Mu Cheng
Chaoyang District
Beijing 100028
China

Océ-Česká republika s.r.o.
Hanusova 18
14021 Praha 4
Pankrác,
Czech Republic

Océ-Danmark A.S.
Kornmarksvej 6
DK 2605 Brøndby
Denmark

Océ-France S.A.
32, Avenue du Pavé Neuf,
93161 Noisy-le-grand, Cedex
France

Océ-Deutschland GmbH
Postfach 101454
4330 Mülheim an der Ruhr (13)
Deutschland

Océ (Hong Kong China) Ltd.
12/F 1202 The Lee Gardens
33 Hysan Avenue, Causeway Bay
Hong Kong

Océ-Hungária Kft.
P.O.B. 237
1241 Budapest
Hungary

Océ-Italia S.p.A.
Strada Padana Superiore 2/B
20063 Cernusco sul Naviglio (MI)
Italia

Océ Systems (Malaysia Sdn. Bhd.)
#3.01, Level 3, Wisma Academy
Lot 4A, Jalan 19/1
46300 Petalig Jaya
Malaysia

Océ-Nederland B.V.
P.O.Box 800
5201 AV ‘s-Hertogenbosch
The Netherlands

Océ Norge A/S
Postboks 53, Grefsen
0409 Oslo 4
Norway

Océ-Poland Ltd.
ul. Łopuszańska 53
02-232 Warszawa
Poland

Océ-Lima Mayer S.A.
Av. José Gomes Ferreira, 11
Ed. Atlas II Miraflores
1495 Algés
Portugal

Océ (Far East) Pte. Ltd./
Océ (Singapore) Pte. Ltd.,
#03-00 Wisma Gulab
190 MacPherson Road
Singapore 348548

Océ España SA
Business Park MAS BLAU
C/Osona 2, 2-3a Planta
08820 El Prat del Llobregat (Barcelona)
Spain

Océ-Svenska AB
P.O.box 1231
S-164 28 Kista
Sweden

Océ-Schweiz AG
Sägereistrasse 29
CH8152 Glattbrugg
Switzerland

Océ (Taiwan) Ltd.
No. 99-24 Nan Kang Road Sec.2
Taipeh, Taiwan
Taiwan, RO

Océ (Thailand) Ltd.
16th Floor, B.B. Building
54 Asoke Road, Sukhumvit 21
Bangkok 10110
Thailand

Océ-U.K.Ltd.
Langston Road
Loughton, Essex IG10 3SL
United Kingdom

Océ-USA Inc.
5450 North Cumberland Av.
Chicago, Ill. 60656
U.S.A.

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Océ Graphics Server L

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Code number 7055892
Edition 1.2

US

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Chapter 1
Read Me First

This manual explains the advanced features of Océ Graphics Server L for advanced users. See the Océ Graphics Server L Start Up Manual for information on basic features.

How to use this manual

This manual includes the following chapters:

Chapter 1 - Read Me First gives a summary of the contents of this manual.

Chapter 2 - Making and saving printer settings describes how to set optimum printer settings for the Océ 5350 printer in Océ Graphics Server L, and to save these settings in a printer configuration.

Chapter 3 - Controlling color and print quality explains how to adjust half-toning settings to improve print quality and deals with advanced color calibration using the CAT editor and CAM profiles.

Chapter 4 - Spool queues explains how to create spool queues and set spool queue options.

Chapter 5 - Advanced settings describes some of the advanced features of Océ Graphics Server L.

Chapter 6 - Previewing describes how to use the Océ Graphics Server L preview to see what your files will look like before printing them on paper.

Chapter 7 - Managing memory settings describes how Océ Graphics Server L deals with your computer's RAM and how you can change memory settings to obtain the best performance from your system.

Chapter 8 - Troubleshooting gives you some solutions to problems you may encounter using Océ Graphics Server L and in particular when dealing with PostScript error messages.

Appendix A - Optimum system configuration explains how to set up your system to obtain the best performance from Océ Graphics Server L.

Appendix B - Running simultaneous sessions gives guidelines for achieving the best performance when running multiple Océ Server sessions on the same computer.

Appendix C - Colors presents a summary of color theory and gives some advice on maintaining color consistency on your prints.

Appendix D - Customizing the button bar shows you how you can customize the Océ Server graphical user interface, such as changing and removing icons on the button bar.

Appendix E - Command Reference gives a list of PostScript commands interpreted by the Océ Server in conjunction with a short description of each command, as well as a list of Océ Server command line parameters.

Appendix F - Océ Poster Layout explains how to install and use the optional Océ Poster Layout application.

Appendix G - Addresses of Océ offices and reader's comment sheet.

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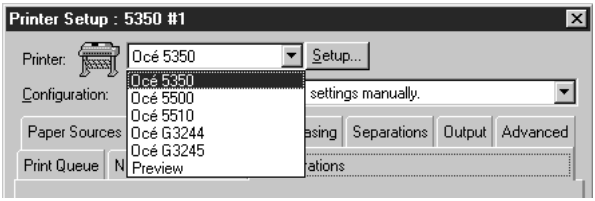
Chapter 2
Making and saving printer settings

This chapter describes how to view stored printer configurations and how to set up and save your own configurations.

Selecting a printer for a spool queue

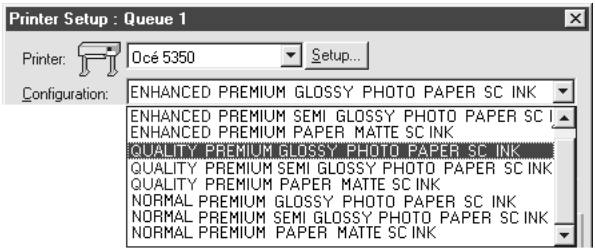
▼ **To select a printer for a spool queue:**

1. On the Print Queue Icon Bar, click the icon representing the printer to which you want to assign the spool queue.
2. Select **Properties...** from the drop-down menu to open the Printer Setup dialogue box.
   Note: *If you are setting up a new spool queue and wish to select a specific printer for it, click on the last printer on the Print Queue Icon Bar and select the* **Add Another Queue option**. *A new Print Queue icon appears. Click this icon and select Properties… to open the Printer Setup dialogue box.*
3. Within this dialogue box, click on the arrow of the drop-down list next to the printer icon. A list of available printers appears.
4. Select a printer from the list.

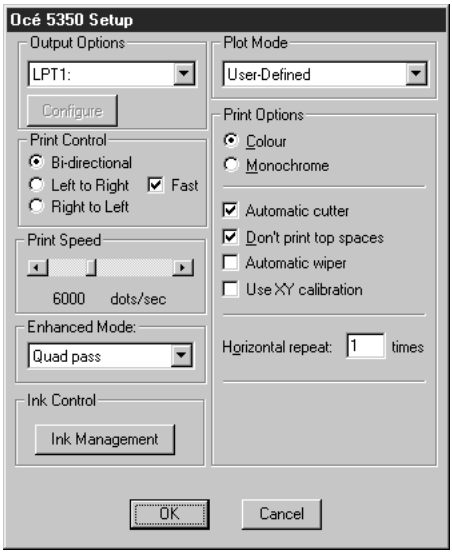


Viewing default printer settings

In the Printer Setup dialog box, click on the down arrow on the **Configuration** list box to display the list of available configurations. Click on a configuration to select it.


Printer Setup : Queue 1
Printer:
Océ 5350
Setup...
Configuration:
ENHANCED PREMIUM GLOSSY PHOTO PAPER SC INK
ENHANCED PREMIUM SEMI GLOSSY PHOTO PAPER SC I
ENHANCED PREMIUM PAPER MATTE SC INK
QUALITY PREMIUM GLOSSY PHOTO PAPER SC INK
QUALITY PREMIUM SEMI GLOSSY PHOTO PAPER SC INK
QUALITY PREMIUM PAPER MATTE SC INK
NORMAL PREMIUM GLOSSY PHOTO PAPER SC INK
NORMAL PREMIUM SEMI GLOSSY PHOTO PAPER SC INK
NORMAL PREMIUM PAPER MATTE SC INK

Click on the **Setup…** button beside the Printer list box to view the settings for your selected configuration.



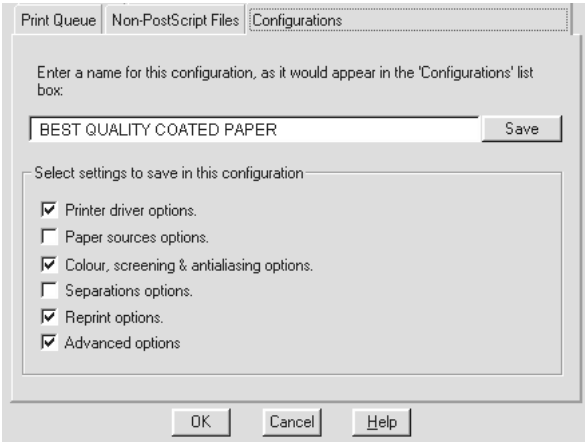
Note: *The range of settings in the* **Setup** *window depends upon the printer currently selected.*

Your ability to change settings in the **Setup** window will depend upon the particular printer configuration currently selected. The settings that apply to the selected configuration are grayed out.

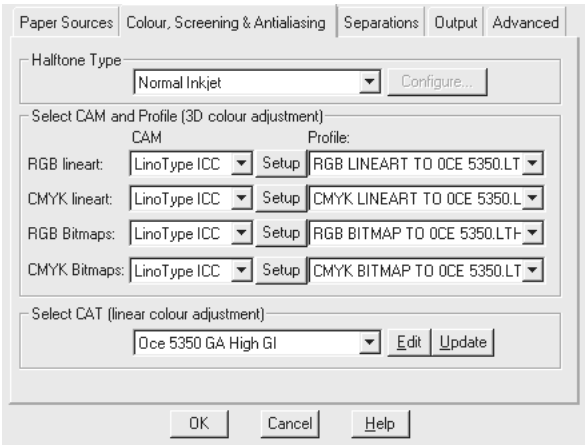
In addition to these optimum settings for the selected printer, default configurations supplied as part of the Océ Server package may also hold optimum settings for Advanced options, Color, Screening and Anti-aliasing, and Separations for example. These are set in the appropriate tabs on the Printer Setup dialog box. Again, your ability to change settings in any of these tabs will depend upon the particular printer configuration currently selected. Default settings are grayed out on the screen.

To check the full range of settings saved as part of a selected configuration, click on the **Configurations** tab within the Printer Setup dialog box.

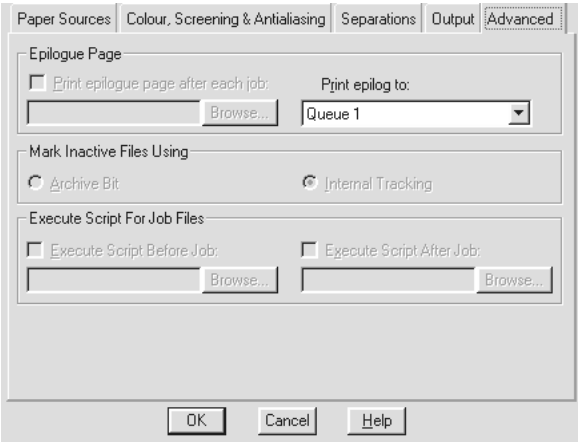
Checked options within the **Select settings to save in this configuration** section of the Configurations tab indicate that settings relating to these options have been saved as part of the configuration. **Printer Driver options** relate to the printer settings viewed via the Setup button as described above. Each of the remaining options listed relates to a tab within the Printer Setup dialog box. Click on the relevant tab to view the settings.



For example, if **Colour, Screening & Antialiasing options** is checked, click on the Colour, Screening & Antialiasing tab.

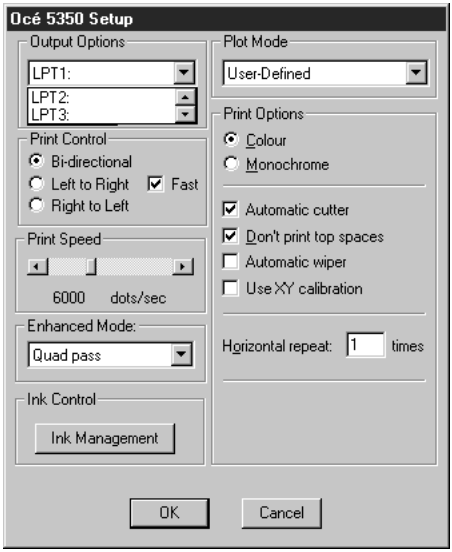


If **Advanced options** is checked, click on the Advanced tab.



Changing the default output options

The **Output Options** setting within the **Setup** window specifies the port to which your output device is connected. If the port shown is incorrect, click on the down arrow in the list box displaying the port connection. A list of possible ports is displayed with up and down arrows on the right side of the list to enable you to scroll through it



Click on the port to which your output device is connected to select it.

Note: *Whenever you change a setting within the Setup window, click on the* **OK** *button to save your setting and return to the Printer Setup dialog box.*

Creating and saving printer configurations

Open the Printer Setup dialog box for the printer you want to create a configuration for:

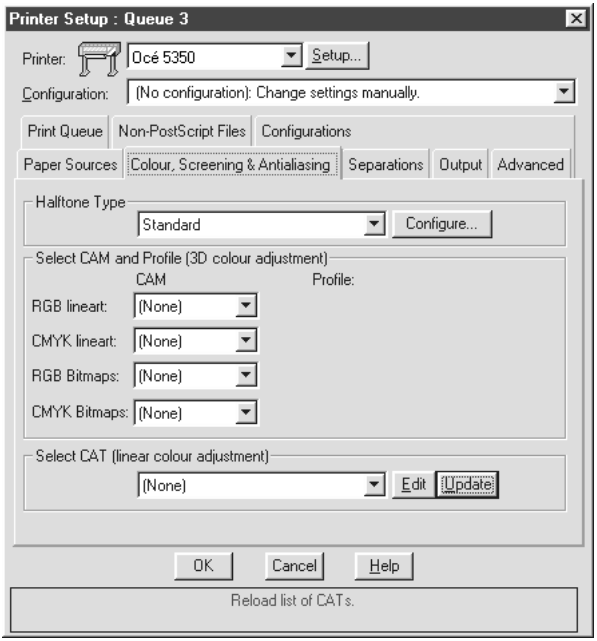
1. Select **No configuration: Change settings manually** in the Configurations: edit box.
2. Click on the **Setup** button and enter your required settings in the Setup window.
3. Select each tab within the Printer Setup dialog box that you wish to specify settings for, and enter your settings.
4. Select the **Configurations** tab. Check the relevant options for which you have entered settings. Type in a name for your configuration in the appropriate edit box and click on the **Save** button on the right side of the edit box. Once saved in this way, your configuration will be available to you to use again via the Configurations list.
5. Click on the **OK** button at the bottom of the Printer Setup dialog box. This will apply your configuration to the printer represented by the Print Queue icon you originally clicked on to access the Printer Setup dialog box.

Chapter 3
Controlling Color & Print Quality

This chapter explains how to set the options on the Colour, Screening and Antialiasing tab on the Printer Setup dialog box. It also explains how to use the CAT editor and CAM profiles to enhance the quality of your color prints.

Controlling the quality of your print

Click on the appropriate Print Queue icon and select **Properties...** from the drop-down menu to open the Printer Setup dialog box. When you want to set your own options, select (No configuration): Change settings manually from the Configurations box. Select the **Colour, Screening & Antialiasing** tab.



Using halftone types

Many halftone printers can only print a small number of distinct colors. When the Océ Server interprets a PostScript file to be printed to such a printer, it approximates other color values by putting down a pattern of pixels in the available colors. This process is known as halftoning. Many newspaper photographs are examples of halftoning.

Click on the down arrow in the **Halftone Type** list box to display the drop-down list of available Halftone Types.

Standard This option uses the standard PostScript halftone pattern which can be adjusted to your requirements as described in ‘Setting a standard screening configuration’ on page 22. It is often used to simulate printing or proofing through an imagesetter.

Error Diffusion Error diffusion ‘diffuses’ the dot patterns for rendering colors, thereby creating a much smoother effect. Error diffusion generates a random pattern of dots, rather than a fixed pattern as with normal halftoning, and represents more closely full 24-bit contone (continuous tone) coloring. Error diffusion produces sharpened edges in images.

FM This option uses frequency modulation to create a type of random diffusion dot pattern. This is similar to error diffusion but is generated during interpretation so is much faster. It will produce coarser results than the other options.

Normal Inkjet This option is similar to Adjusted Inkjet except that it is a second-order dispersed dot halftone. In this case, several pixels are grouped together, then switched on or off to produce the halftone pattern.

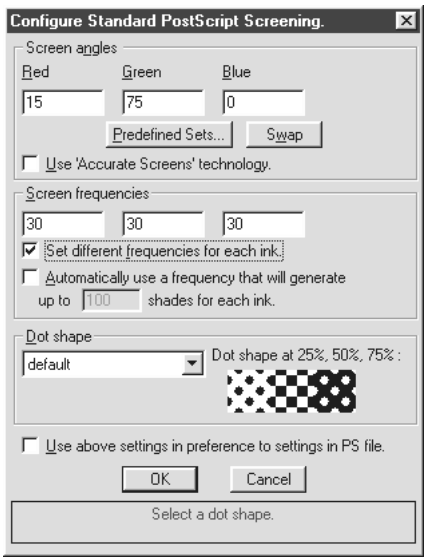
Adjusted Inkjet This option is a first-order dispersed dot halftone, which means that individual machine pixels are laid down in a random order to allow printers that are not contone to approximate more closely to a true contone device. This produces a photorealistic quality of output and is the preferred choice for inkjet printers.

200/300 dpi Electrostatic This is a dispersed dot halftone that has been customized to improve low resolution printing.

400 dpi Electrostatic This is a dispersed dot halftone that has been customized to improve printing at resolutions of 400 to 600 dpi.

Setting a standard screening configuration

When you select **Standard** as the Halftone Type, the **Configure...** button to the right of the Halftone Type edit box becomes active. Click on this button to open the Configure Standard PostScript Screening dialog box.



The most common way of controlling the halftoning process is by specifying a screen frequency, a screen angle and a spot function.

Consider the method used by most printers in the printing process: The printer lays down a fine array of pixels over the printing area. The interpreter conceptually lays down a grid (also known as a halftone screen) over the printer pixel array. It then treats each rectangle of the grid as a halftone cell. Each cell can then be made to approximate a different color intensity by painting some of the cell's pixels with that color's ink, and leaving the rest unpainted. In general, a square halftone cell N pixels to the side can represent $N^2 + 1$ different intensities.

The size of the grid is determined by the screen frequency and the printer's resolution (usually specified as the number of pixels the printer puts down per vertical and horizontal inch). A screen frequency of F means the interpreter will use F halftone cells per inch. For example, a screen frequency of 40 for a

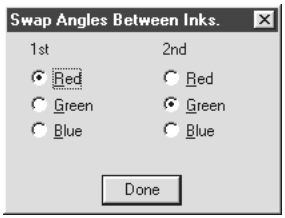
400 dots per inch (dpi) printer means there will be 400 / 40 = 10 pixels per halftone cell (this implies $10^2 + 1 = 101$ different color intensities).

Note: *These halftone screens are defined independently for each of the printer's color planes (usually one for each of the inks used by the printer). Also, each color's halftone screen can be at a different angle relative to the others (in fact, for best results, it should be different). This angle is determined by the screen angle.*

The pattern that is used to fill each cell is determined by the spot function. This is a PostScript procedure that accepts the coordinate of each pixel in the halftone cell. A pixel at the center of the cell has coordinates (0,0), one at the top right corner is numbered (1,1) and one at the bottom left is numbered (-1,-1). The spot function must return to the interpreter a number within the range -1 and 1, which denotes that pixel's ordering in the halftoning process. As the intensity of a color varies from full to none, the first pixel not painted with that color is the one whose spot function value is the lowest.

The Océ Server allows you to enter the screen frequency and angle for each of the printer's color planes. You may also create your own spot function, or select one of several dot shapes predefined for you by the Océ Server.

Screen angles Type in the angles for each of the color planes. These can have up to six decimal places; this allows the screen angles to be specified more accurately, thus reducing possible moiré (undesirable patterning) problems. Pressing the **Swap...** button displays the Swap Angles Between Inks dialog box.



This allows you to swap the angles of two or more plates. This feature is useful when moiré patterning is apparent on the output. Clicking on the **Predefined Sets...** button displays a list of predefined sets for you to select from. This list includes a **Default** set which returns the angles to their standard values, i.e. 15° for cyan, 75° for magenta, 0° for yellow and 45° for black (CMYK); 15° for red, 45° for green and 75° for blue (RGB).

The **Use Accurate Screens Technology** option is useful for high resolution printers. However, for optimal results do not use this option with the Océ 5350.

Screen frequencies By default, you type in an approximate number of shades (gray levels) for each color plane, and the Océ Server will dynamically work out the appropriate screen frequency. As the number of shades changes, so does the screen frequency. This takes place even if you subsequently change the printer resolution.

The formula used to calculate the screen frequency for a given output resolution and shade (gray level) count is:

frequency = device resolution

square root (shades required)

Note that requesting a high gray level count on a low resolution printer will result in a very coarse screen frequency.

Unchecking the **Automatically use a frequency that will generate up to… shades for each ink** option enables the 'Screen frequencies' edit box, so you can key in the screen frequency to use, as opposed to entering the number of shades for each ink.

Unchecking this option also displays the **Set different frequencies for each ink** prompt and checkbox. Check the **Set different frequencies for each ink** option if you wish to specify a different screen frequency for each color plane. Otherwise, the screen frequency specified is a global parameter used by all four color planes.

Dot shape Select the appropriate spot function to use from the pull-down list. A diagram may appear to the right of the pull-down list; this shows how the dot shape changes with an increase in tonal value.

Default Selects the default spot function. This is know as a Euclidean spot function and is basically a round dot that changes to a square at 50% density.

Ellipse Selects a spot function that defines the spot as an ellipse.

Line Selects a spot function that defines the spot as a straight line.

Circle Selects a spot function that defines the spot as a circle.

Rhomboid Selects a spot function that defines the spot as a diamond.

Use above settings in preference to settings in PS file Checking this box will enable the downloading of the spot functions to the interpreter, as well as 'locking' the screen frequency and angles so PostScript files submitted as print jobs will not be able to change them. Unchecking the box will still save changes you may have made to spot functions, but will not send them to the interpreter. In addition, although screen frequency and angle information will still be sent to the interpreter, it will not be 'locked'. This means that spot function, frequencies and angles can be set by individual PostScript jobs.

Controlling the color on your print

The aim of the Océ ICC-based output profiles for the Océ 5350-600 printer is to help you perform color management as accurately as possible. To achieve this, use the generic CAT provided, in conjunction with the Printer Configuration to set up OGSL in the appropriate Printing Mode.

Océ creates profiles based on a calibrated system for specific ink/media combinations. For this reason, Océ also supplies the CAT (Color Adjustment Table) along with the profile. Always use this CAT to set the printer in the same calibrated mode as it was when the profile was generated.

However, to compensate for the minimal variations in each printer (such as changes in environmental temperature/humidity, cartridge age, etc.) it may be necessary to modify the generic CAT or even generate a specific CAT to adapt to your printer. For further instructions, (see 'Using the CAT editor to calibrate the printer' on page 31).

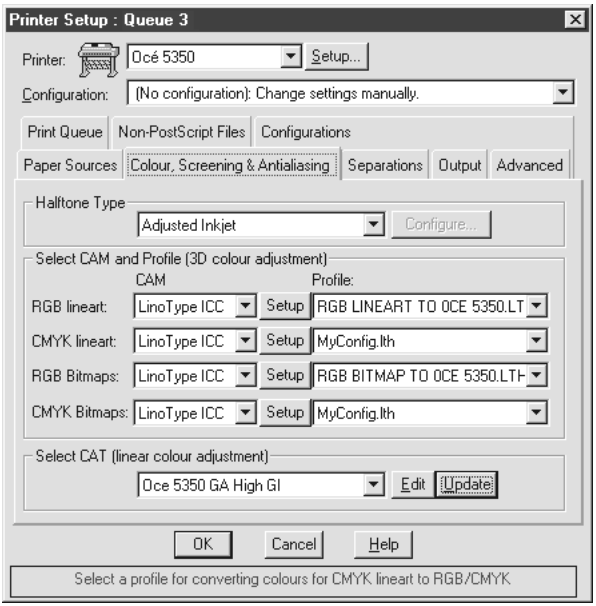
- **CAMs** (Color Adjustment Modules) are ICC (International Color Consortium) profiles that use three-dimensional descriptions of hue, saturation, and brightness to characterize the color space of your device. Profiles for the Océ 5350 were created using the Heidelberg PrintOpen software. See 'Working with colors' on page 112 for a detailed explanation of color spaces and profiles.
- **CATs** are one-dimensional correction tables that change the density of a particular ink color. CATs regulate the output of different printers to obtain the same calibrated output (in terms of density), and gain maximum benefit from Océ profiles.

Selecting and loading a CAM profile

The Océ Graphics Server L comes equipped with several predefined printer configurations for various media/ink combinations. However, you can also set your own options and customize your configurations.

▼ **To control print color**

1 From the Printer Setup dialog box, select Colour, Screening & Antialiasing.



2 From the Configuration list (top of dialog box), select **No configuration: Change settings manually**.

▼ **Selecting a profile configuration**

From the heading ...Select CAM and Profile (middle of dialog box), select a profile configuration for RGB line art, CMYK line art, RGB bitmaps, and CMYK bitmaps, respectively.

Note: *The distinction between RGB and CMYK applies to the type of input color space. Bitmap-type information is described as pixel by pixel. Line art-type information is described as a PostScript command or instruction. The Océ Graphics Server L detects automatically if the printing information is of bitmap or of line art type, or of both.*

1. For each type of RGB and CMYK information, click the arrow on the list of CAMs to select a LinoType ICC profile. A list of Profile configurations appears next to the Setup button.
2. Select the appropriate profile configuration for each type of information.
3. Select a CAT and a Halftone type.
4. Click OK.

▼ **Modifying a profile configuration**

1. From the Printer Setup dialog box, select Colour, Screening & Antialiasing.
2. From the Configuration list (top of dialog box), select **No configuration: Change settings manually.**
3. From the list of CAMs next to the type of input source you want to use, click the arrow and select a Linotype ICC profile.
4. Click the Setup button next to the list box. A Setup ICC Profile Configurations dialog box appears. At the top, there is a list of Available Profile Configurations displaying the Name, Type, and Description for each available profile.
5. Click the Name of the profile configuration you want to modify. That profile's Configuration Properties appear.
6. Click the arrow on the list to select the property you want to modify.
7. When finished, click Save.
8. Click Exit Setup.

▼ **Creating a new profile configuration**

1. From the Printer Setup dialog box, select Colour, Screening & Antialiasing.
2. From the Configuration list (top of dialog box), select **No configuration: Change settings manually.**
3. From the list of CAMs next to the type of input source you want to use, click the arrow and select a Linotype ICC profile.
4. Click the Setup button next to the list box. A Setup ICC Profile Configurations dialog box appears.
5. Select an input profile corresponding to your input device (scanner) or the default profile.
6. Select an output profile along with media.
7. Select a proxy file if you are simulating another printer. Please (see 'Maintaining color consistency' on page 115) for more information.
8. Select Rendering Intent.

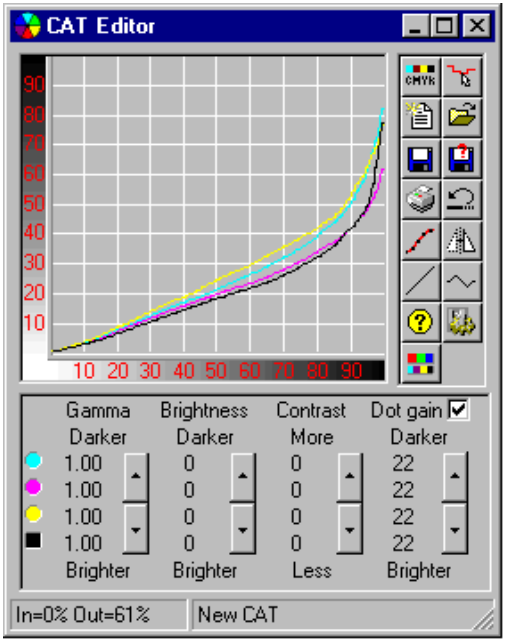
9 Give the Profile Configuration a new name and description.
Note: *The Profile Configuration name must not exceed 30 characters.*
10 Click Save.
11 Click Exit Setup.

▼ **Viewing your color settings**

1 From the Printer Setup dialog box, select Colour, Screening & Antialiasing.
2 Click the arrow in the Configuration list box.
3 Select the configuration with the color settings that you want to see. All settings appear.
4 Click Cancel.

Selecting and loading a CAT file

The bottom section of the Colour, Screening & Antialiasing tab is headed **Select CAT (linear color adjustment)**.



OGSL uses the CAT (Color Adjustment Table) to linearize and adjust the printer output to a specified dot gain. Each CAT file defines output color intensities (color output to the printer) for each possible input color intensity

(color specified by the PostScript print job). The CAT Editor allows each color channel red, green, and blue (RGB) or cyan, magenta, yellow and black (CMYK) to be linearized, in order to take into account the physical effects in your printer such as media and ink types.

The Océ Server Graphic Server L comes with generic CAT files to adjust the colors for your printers in order to obtain maximum benefit from the Océ profiles.

Selecting a CAT file Click on the down arrow in the Select CAT list box to select the appropriate CAT to apply to your print job.

Updating the list of CAT files Click on the Update button to ensure the Select CAT list comprises the full range of currently existing CAT files.

Launching the CAT Editor Click on the **Edit** button to launch the CAT Editor if you wish to create your own CAT file, or edit your selected CAT.

Click on the RGB Mode button to define the colors in terms of red, green and blue ink intensities.

Click on the CMYK Mode button to define the colors in terms of cyan, magenta, yellow and black ink intensities.

The CAT Editor displays the relationship between the input color intensities (color specified by your PostScript print job) and the output color intensities (color output by your printer) as four different curves on a graph (e.g. one curve for cyan, one for magenta, one for yellow and one for black). The horizontal axis (x-axis) of the graph represents input intensities from 0% to 100%. The vertical axis (y-axis) of the graph represents output intensities from 0% to 100%.

Suppose your PostScript print job specifies an input of 50% magenta. You want to know what percentage of magenta will actually be output by your selected printer as a result. To map this input/output relationship, draw an imaginary vertical line from 50% on the x-axis to intercept the magenta curve. Then draw an imaginary horizontal line from the intercept point on the magenta curve to the y-axis. The point at which your horizontal line meets the y-axis is the output intensity level. For example, when the magenta curve is a straight diagonal line (linear), 50% magenta input will map to 50% magenta output.

When you position the mouse pointer in the graph section of the CAT Editor, the input/output relationship at the position of the mouse pointer is displayed in the bottom left corner of the CAT Editor (e.g. 'In=29% Out=31%'). You can therefore use the mouse pointer to trace along the line of a curve and see accurately what the input/output relationship is at any point along the curve.

Using the CAT editor to calibrate the printer

Your output print can vary depending on factors that affect your printer such as cartridge age, environmental conditions (temperature, humidity), inks, and media. To correct these variations, you calibrate the printer. This calibration process linearizes the actual dot area of the printer.

To get the benefits of the Océ profiles, the calibration process also adjusts the dot gain to specified values for the media and ink combination. If necessary, this adjustment can lower the maximum ink values and reduce the ink drying time. The calibration process involves four phases:

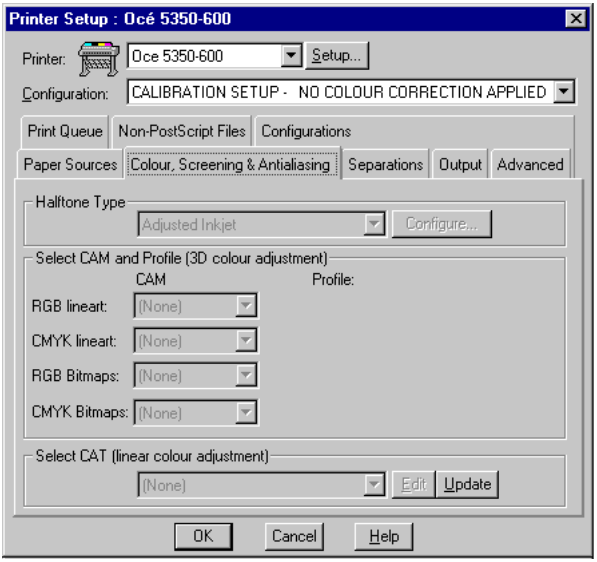
- Printing out a color linearization chart from your printer
- Reading the values from the chart using a densitometer (X-Rite DTP32, DTP41, and DTP51)
- Adjusting the maximum ink values
- Adjusting the dot gain

Note: *Before you start, verify that your printer and ink cartridges are in good working order, and that you have installed the media and ink for which you want to calibrate. See your printer documentation for details.*

▼ **To print the color linearization chart**

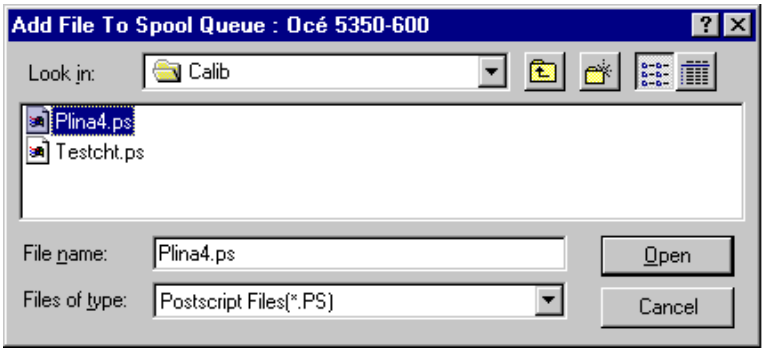
1. Right-click the icon of the printer to calibrate and select **Properties**.
2. Select the Colour, Screening & Antialiasing tab.

3 In the **Configuration** box, select **Calibration setup: No color correction applied** to turn off all setting, as shown below.



4 Click **OK** to close the dialog box.

5 Right click the printer icon and select **Add file to queue**. A browser appears.



6 From the OGSL folder, select **Calib/Plina4.ps** and click **Open**.

7 From the **List of active jobs**, select **Océ linearization A4**. Check that you have switched on the printer.

8 Right-click and select **Print file**.

9 When printing completes, cut out the A4 size chart and allow it to dry completely.

▼ **To read values using the densitometer**

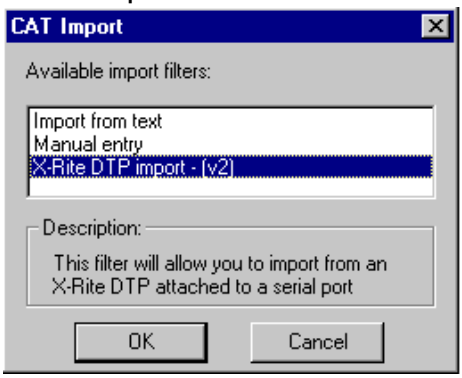
1 Right-click the icon of the printer to calibrate and select **Properties**.

2 Select the Colour, Screening & Antialiasing tab to display the printer setup dialog box.

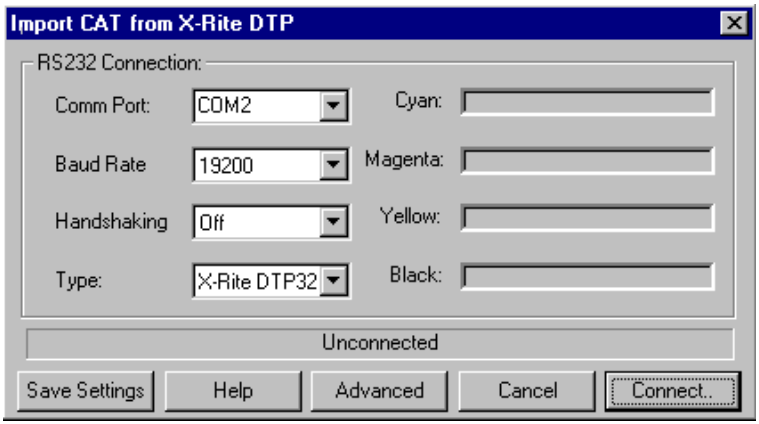
3 From the **Configuration** box, select **Change settings manually**.

4 Click **Edit**. The CAT editor window appears.

5 Click the **Import Modules** button.



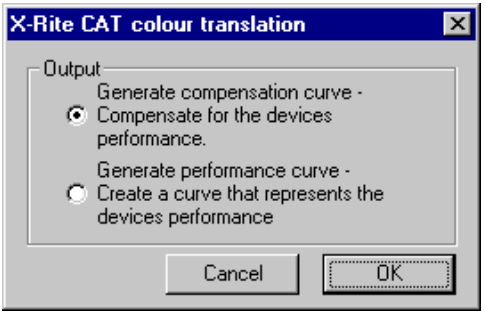
6 From the CAT import dialog box, select **X-Rite DTP import** and click **OK** to open a settings dialog box.



7 Enter the appropriate settings:

- **Type** of densitometer **(**X-Rite DTP32, DTP41, or X-Rite DTP51)
- **Comm port** to which the densitometer is attached
- **Baud Rate**
- **Handshaking** to on or off

8 Click **Advanced** to specify the output of a **compensation curve**, and click OK.

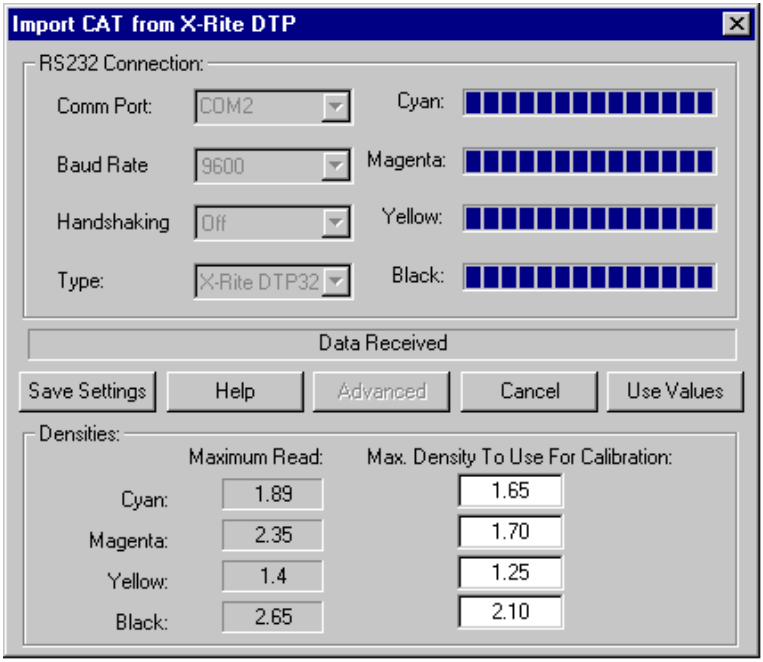

X-Rite CAT colour translation
Output
Generate compensation curve - Compensate for the devices performance.
Generate performance curve - Create a curve that represents the devices performance
Cancel
OK

9 Click **Connect.** The display on the densitometer reads “Wisp-PS CYN” (applicable for the DTP32 only.)

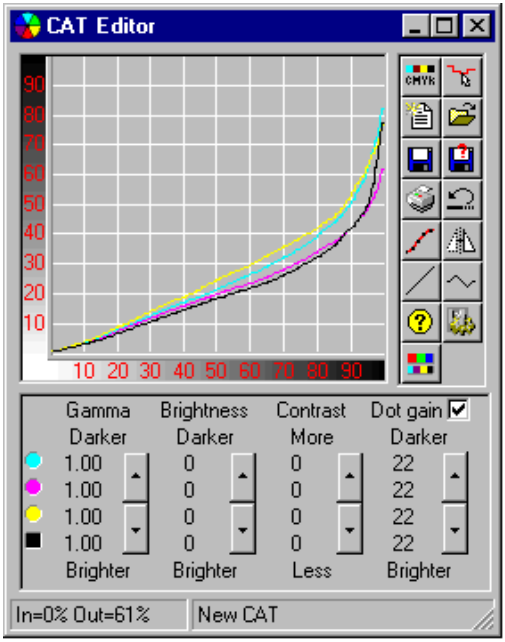
10 Insert the linearization chart into the densitometer in the direction of the arrow for each color, starting with Cyan (the colors are numbered from 1 to 4). The program reads the values communicated by the densitometer.

▼ **To adjust for maximum density**

1 In the **Max. density to use for calibration** boxes, enter the appropriate values for each color, referring to your media specifications for guidelines.
Note: *For glossy premium paper, the CMYK density values are 1.65, 1.70, 1.25, and 2.10, respectively.*



2 Click **Use values** to calculate the dot area curve for each color, as shown below.



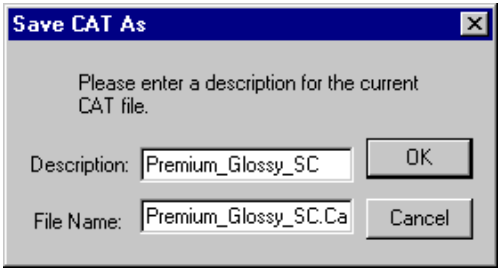
▼ **To adjust the dot gain and save the calibration**

Note: *Océ profiles are optimized for printers printing with a 22% dot gain at 40% input.*

1 In the CAT Editor dialog box, select the **Dot gain** checkbox.

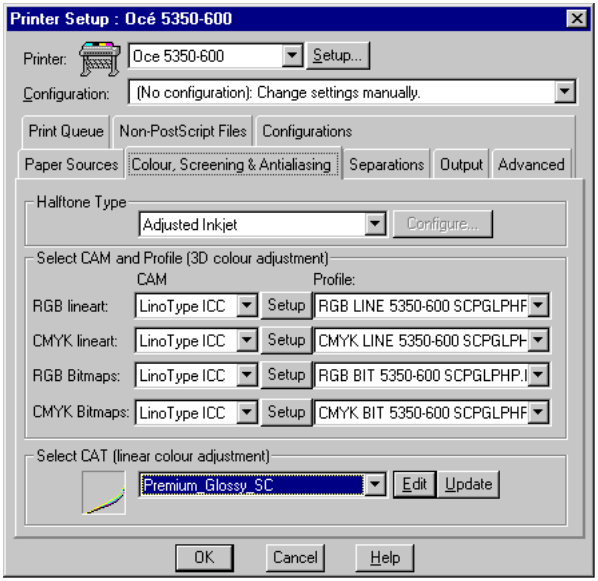
2 Under **Darker**, click the arrows up or down to set the desired value, or to 22% for Océ profiles.

3 Click the **Save as** icon and give the calibration a name (*.cat).



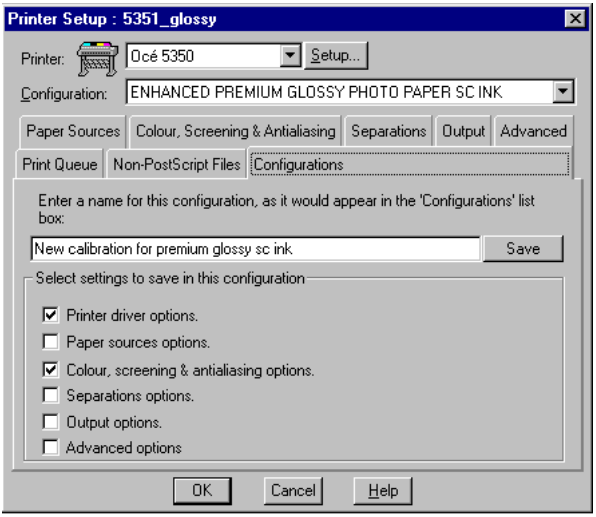
▼ **To print using the calibrated curve**

1. Right-click the printer icon in the main window and select **Properties**.
2. Select the Colour, Screening & Antialiasing tab.
3. In the **Configuration** box, select **Change settings manually.**
4. Select the the CAT you have just saved.
5. In the **Configuration** box, select the medium and click OK.



▼ **To save the entire configuration**

1 Right-click the printer icon in the main window and select **Properties**.
2 Select the Colour, Screening & Antialiasing tab.
3 In the **Configuration** box, select **Change settings manually.**
4 Select the **Configurations** tab.



5 Give the configuration a name and click **Save**.
6 Select the applicable settings for the configuration and click OK.

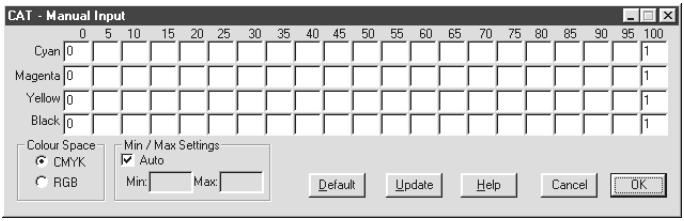
Other CAT import options available

▼ **Manual entry**

Suppose you wish to create a calibration CAT, but your type of densitometer is not currently supported by the Océ Server. You can enter the readings manually from your densitometer. You can also manually enter values for an RGB color space to create a CAT.

1 Make sure the Select CAT list box within the Colour, Screening & Antialiasing tab is set to **None.** Print the standard linearisation chart on your selected printer if applicable. Launch the CAT Editor.

2 Open the CAT Import list box and select the **Manual entry** option. Click on **OK** to open the CAT Manual Input dialog box



The range 0 to 100 displayed across the top of the grid in this dialog box equates to the horizontal x-axis (input color intensities) of the CAT Editor. When **Auto** is checked in the Min/Max section of the dialog box, the first value for each color is automatically set to 0 and the top value to 1 (100%) from left to right across the grid.

3 Deselect the Auto option to enter your own Min: and Max: values.

4 Select CMYK or RGB color space as appropriate, and enter your values for each of the colors on the grid. (Clicking on the **Default** button will clear all the values you have entered on the grid.)

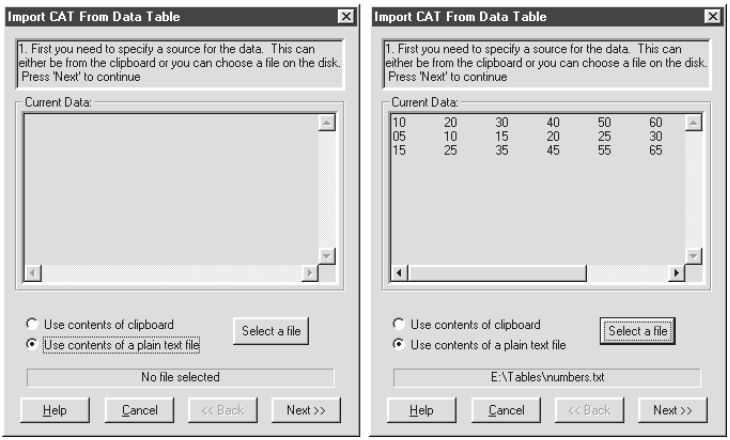
5 Click on the **Update** button for the Océ Server to create a CAT from the values entered and display the CAT as a graph in the CAT Editor.

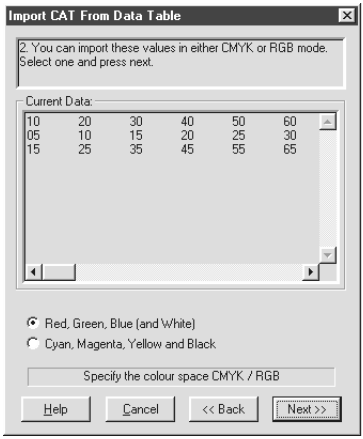
6 When entering values manually, you must invert the CAT data by clicking the **Invert** button. This obtains the CAT that actually linearizes your printer.

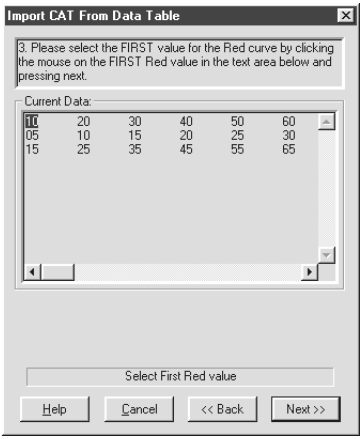
Import from text

You can also import ASCII-delineated text files to create a CAT (for example a table of numbers created within an application such as Excel). These numbers can either be imported from a text file stored on your system or from the Windows clipboard.

1. Make sure the Select CAT list box within the Colour, Screening & Antialiasing tab is set to **None**. Launch the CAT Editor.
2. Open the CAT Import list box and select the **Import from text** option. Click on **OK** to open the Import CAT from Data Table dialog box, as shown on the next page.
3. Follow the instructions at the top of the dialog box to import your values and create a CAT.
   For example:

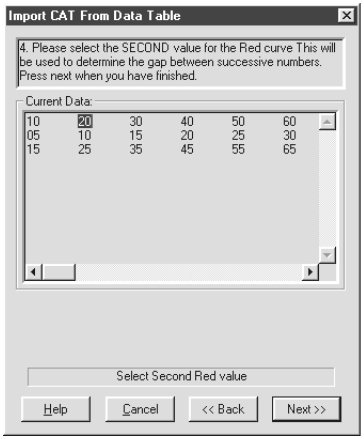

Import CAT From Data Table
1. First you need to specify a source for the data. This can either be from the clipboard or you can choose a file on the disk. Press 'Next' to continue
Current Data:
Use contents of clipboard
Use contents of a plain text file
Select a file
No file selected
Help
Cancel
<< Back
Next >>
Import CAT From Data Table
1. First you need to specify a source for the data. This can either be from the clipboard or you can choose a file on the disk. Press 'Next' to continue
Current Data:
10 20 30 40 50 60
05 10 15 20 25 30
15 25 35 45 55 65
Use contents of clipboard
Use contents of a plain text file
Select a file
E:\Tables\numbers.txt
Help
Cancel
<< Back
Next >>

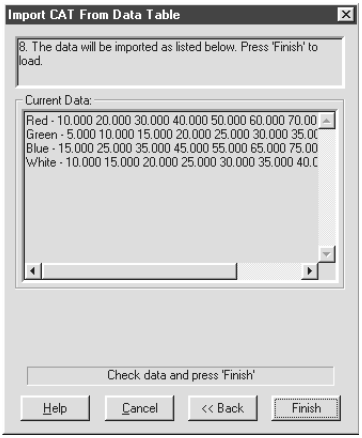

Import CAT From Data Table
2. You can import these values in either CMYK or RGB mode. Select one and press next.
Current Data:
10 20 30 40 50 60
05 10 15 20 25 30
15 25 35 45 55 65
Red, Green, Blue (and White)
Cyan, Magenta, Yellow and Black
Specify the colour space CMYK / RGB
Help
Cancel
<< Back
Next >>


Import CAT From Data Table
3. Please select the FIRST value for the Red curve by clicking the mouse on the FIRST Red value in the text area below and pressing next.
Current Data:
10 20 30 40 50 60
05 10 15 20 25 30
15 25 35 45 55 65
Select First Red value
Help
Cancel
<< Back
Next >>

You will then be prompted in turn to specify a FIRST value for your Green/Magenta curve, your Blue/Yellow curve and your White/Black curve.

4 When you have completed specifying the data, press **Finish.**


Import CAT From Data Table
4. Please select the SECOND value for the Red curve This will be used to determine the gap between successive numbers. Press next when you have finished.
Current Data:
10 20 30 40 50 60
05 10 15 20 25 30
15 25 35 45 55 65
Select Second Red value
Help
Cancel
<< Back
Next >>

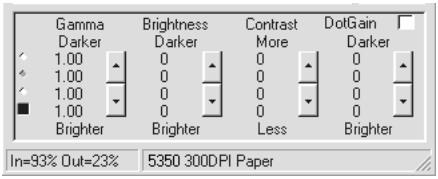

Import CAT From Data Table
8. The data will be imported as listed below. Press 'Finish' to load.
Current Data:
Red - 10.000 20.000 30.000 40.000 50.000 60.000 70.00
Green - 5.000 10.000 15.000 20.000 25.000 30.000 35.0
Blue - 15.000 25.000 35.000 45.000 55.000 65.000 75.00
White - 10.000 15.000 20.000 25.000 30.000 35.000 40.0
Check data and press 'Finish'
Help
Cancel
<< Back
Finish

The Océ Server will create your CAT and display it as a graph in the CAT editor.

Editing a CAT file

You can edit your CAT to adjust a full curve or to adjust parts of a curve. First you need to select the color or colors of the curves you wish to edit.

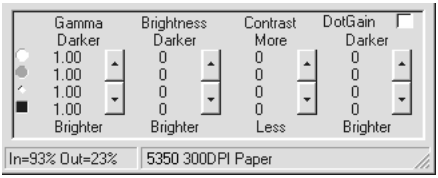
Selecting colors for editing curves When you are editing your CAT you may wish to adjust a curve, i.e. the input/output relationship, for one color, for each color individually, or for all the colors in the same way.



Colors available for selection are displayed down the left side in the Colour Controls section of the CAT Editor. (Red, blue, green and white when you are in RGB mode. Cyan, magenta, yellow and black when you are in CMYK mode).

Click on a color to select it. The selected color will be shown as a square. This means it is the controlling color and when you begin editing you will be able to make changes to this color curve. Colors not currently selected are shown as small diamonds.

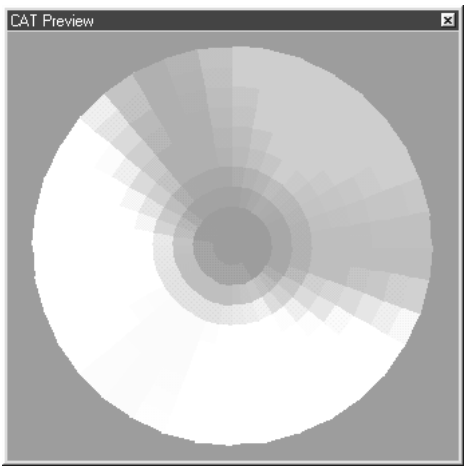
Suppose you wish to make the same changes simultaneously to several color curves. First select the controlling color, and then hold down the **SHIFT** key and select the other required color(s). The controlling color will still appear as a square. The additional selected colors will appear as circles.



This time when you begin editing, changes made to the controlling color curve will be applied simultaneously to the other selected color curve(s).

Clicking on a color to select it (without using the **SHIFT** key) automatically deselects the other colors.

Click on the Preview button to open the CAT Preview window and display the color circle.



This is helpful in determining the effect of the adjustments you make.

Adjusting a full curve Adjust the full curve or curves of your selected color(s) by setting Gamma, Brightness and Contrast in the Colour Controls section of the CAT Editor. (It is normally better to first adjust all the curves together and then make new color selections to adjust curves individually.)

Gamma Affects both the brightness and contrast of your image. For example, the higher the Gamma setting, the greater the brightness and contrast.

Dot Gain Dot Gain is concerned with ink intensities. A dot of ink printed on paper will spread. To view the effect of your DotGain settings in the Cat Preview window, check the Dot Gain checkbox. When DotGain is enabled you will be unable to adjust parts of a curve. To disable DotGain, click again on the DotGain checkbox.

Adjusting parts of a curve You may find that adjusting a full curve is insufficient to give you the result you require, so the Océ Server provides you with two ways to adjust parts of a curve.

Editing manually

Click on the Manual Edit Mode button.

The cursor will change in appearance to become a pencil when you position it in the graph section of the CAT Editor. You can then edit the controlling color curve by dragging. (If you select one or more additional colors, dragging the controlling color curve simultaneously changes the shape of the other selected color curve(s) to match the controlling curve.)

Manual editing tends to result in a jagged color curve. Therefore, click on the Smooth Selected Colours button to smooth your curve(s).

Using the spline editing method

This is the recommended method for adjusting parts of a curve. Splines are pick-up points positioned on a curve. You then adjust the shape of the curve by selecting the appropriate spline and dragging.

Click on the Spline Point button. A window will open to enable you to specify how many splines you wish to position along your selected curve(s). The default number of splines is 8.

Click on the Spline Edit Mode button to enable you to carry out your spline editing.

The appearance of the cursor will change to a cross when you position it over a spline. When you select a spline that is between two others on a curve, the two others are the limits to which you can drag the selected spline to the right or to the left. Double click on a curve to insert an additional spline.

To remove a single spline, position the cursor over the spline and double click. To remove all splines, click again on the Spline Point button.

Click on the Smooth Selected Colours button if you wish to smooth your curve(s) when spline editing.

▼ Other useful editing tools

Click on the Undo button to cancel the last editing change you made.

Click on the Linear button to change your selected color curve(s) to a straight diagonal line.

Click on the Invert button to invert your selected color curve(s).

▼ Saving your CAT

Click on the Save button to save any changes made to your CAT. If your CAT file is Untitled, the Save As dialog box will open so that you can key in a description and a filename.

Click on the Save As button to open the Save As dialog box.

The Océ Server saves all CAT files in a particular directory on your system set up during installation. If you have changed a CAT file and not selected either the 'Save' or 'Save As' option, a Warning dialog box will open when you exit the CAT Editor.

▼ Creating a new CAT

Click on the New CAT button to display a linear CAT curve, ready for you to adjust, in the graph section of the CAT Editor.

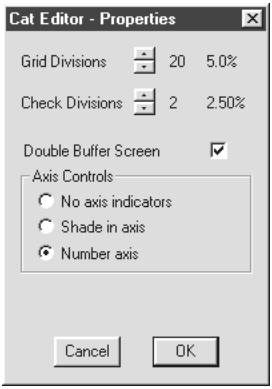
▼ Loading an existing CAT

Click on the Load CAT button to open the Select CAT to Load dialog window. Within this window you can select the CAT you wish to work with from the list of existing CAT files.

Exiting the CAT Editor returns you to the Colour, Screening & Antialiasing tab within the Printer Setup dialog box.

Changing the appearance of the CAT editor

You display the CAT Editor Properties dialog box using the CAT Editor



Properties button on the CAT Editor button bar.

Within this dialog box you can change the appearance of the CAT Editor on screen.

For example, setting 5 (20%) as the number of **Grid Divisions** will divide the graph section of the CAT Editor into a grid five squares by five squares. If the **Number Axis** option is also checked, the x-axis and y-axis will be numbered in steps of 20%. To turn the grid off, select **Off** as the Grid Divisions setting.

Select a numerical setting as the **Check Divisions** option to display indicators sub-dividing each grid square. For example, a Check Divisions setting of 2 (50%) will display indicators at 50% intervals along each square. To remove the indicators, select **Off** as the Check Divisions setting.

Checkboxes in the 'Axis Controls' section of the CAT Editor Properties dialog box enable you to display the percentage numbers as specified in the Grid Divisions setting along the x-axis and the y-axis, shade in the axes, or display neither shading nor percentage numbers along the axes.

Note: *To save and apply any settings that you make in the Colour, Screening & Antialiasing tab, click on the* **OK** *button at the bottom of the tab.*

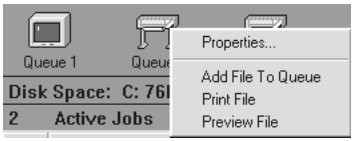
Chapter 4
Spool Queues

This chapter explains how to create spool queues and set spool queue options.

Adding a spool queue

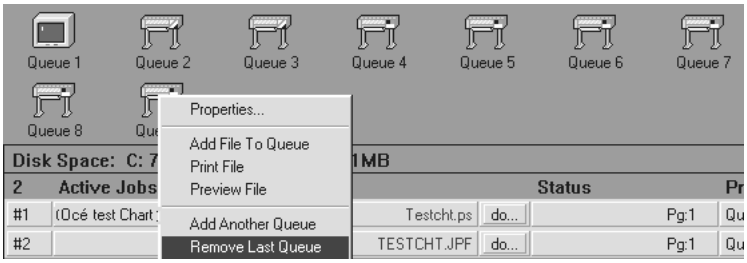
The Océ Server automatically assigns a spool queue to each output device represented by an icon in the Print Queue Icon Bar.

Clicking on any icon in the Print Queue Icon Bar displays a drop-down menu of options. This menu is specific to the Print Queue icon clicked on and any settings made will only apply to jobs in that print queue.



When there is only one icon displayed in the Print Queue Icon Bar and you click on it, the drop-down menu offers the additional option to **Add Another Queue**.

This option to **Add Another Queue** is also displayed when there are several icons along the Bar and you click on the most recently added icon. However, in this case, the drop-down menu will be extended to include the option to Remove Last Queue.



Select the **Add Another Queue** option to cause the Océ Server to assign a spool queue and display the icon for the new queue along the Print Queue Icon Bar. By default, the Océ Server assigns your new spool queue to a device with the same setup as the one represented by the first spool queue.(For details of how to change the set up for the device please see chapter 2, ‘Making and saving printer settings’ on page 11.)

Note: *When you have deleted several spool queues and then add new ones, the Océ Server assigns settings to the new spool queues based on the deleted spool queue settings, which you can modify as needed.*

The icons along the Print Queue Icon Bar are ordered from left to right, so each time you add a queue to your system, the icon representing the new queue appears in the Bar to the right of the existing icon(s). When there are seven queues in operation, the icons for any new queues added are displayed along a second row on the Bar.

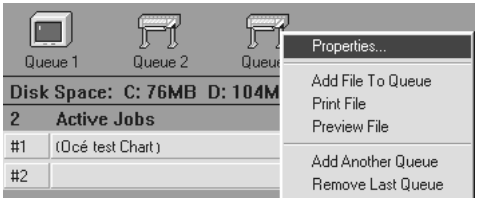
Removing a spool queue

Simply click on the icon representing the last queue added to your system and select the **Remove Last Queue** option from the drop-down menu.

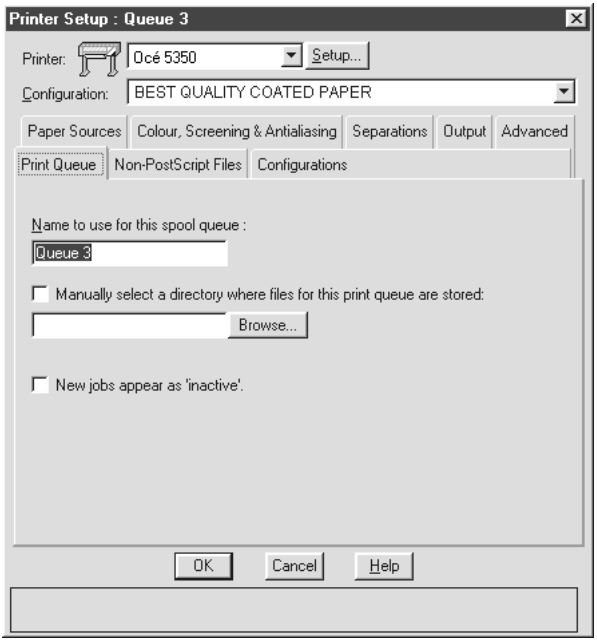
Note: *This option is not available when only one icon is displayed on the Print Queue Icon Bar.*

Naming a spool queue

Select the **Properties** option from the drop-down menu of the Print Queue icon representing the output device you wish to name the spool queue for.



Selecting **Properties...** opens the Printer Setup main dialog box.



Click on the **Print Queue** tab and then key in your own name for the spool queue in the edit box beneath the prompt **Name to use for this spool queue:**. Click on **OK** at the bottom of the Printer Setup: dialog box. The name you keyed in will be saved and displayed below the icon on the Print Queue Icon Bar. Since the Océ Server can have up to fourteen spool queues set up at any one time, it is useful to give these queues names which will be most easily understood by yourself and other users when published across the network.

Setting up spool queue options

▼ **Sending new print jobs to the inactive jobs list**

Simply check the box beside the **New jobs appear as 'inactive'** prompt within the Print Queue tab in the Printer Setup: dialog box. Then click on the **OK** button.

Any files sent to that spool queue will be displayed on the Océ Server main screen in the Inactive Jobs list. These files will be held and not sent to the output device when the Server spooler is started.

Specifying a directory where job files are stored

Suppose you have files stored in a directory on your system that you wish to send to a particular Océ Server spool queue (for example, files stored in a directory on a UNIX system). Click on the Print Queue icon for the relevant spool queue and open the Printer Setup: dialog box. Select the **Print Queue** tab.

Tick the checkbox beside the **Manually select a directory where files for this print queue are stored:** prompt.

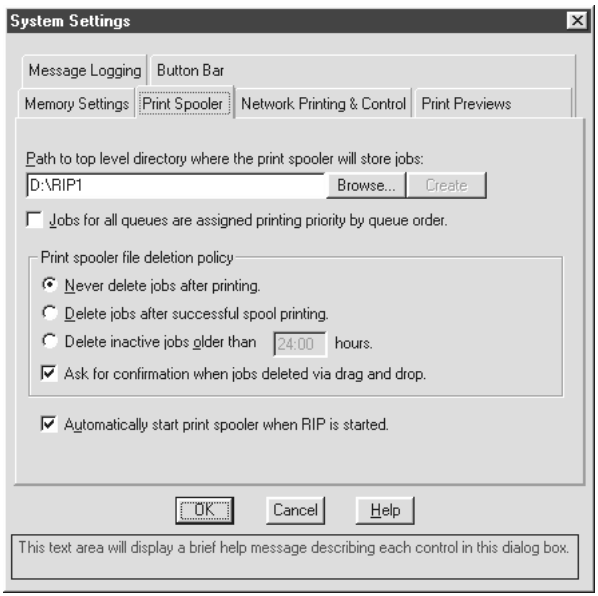
You can then enter the path and name of the directory in the edit box beneath the prompt, or click on the **Browse...** button to search for and select the directory.

Click on the **OK** button to save and use your setting. The Océ Server spooler will look for print jobs for that individual spool queue in the directory you have specified, as opposed to looking in the default directory. (For further details, see'Setting global spooler options for print jobs and spool queues' on page 52.)

Should you wish to make the Océ Server spooler look in the default directory again, uncheck the box beside the **Manually select a directory where files for this print queue are stored**: prompt and click on the **OK** button.

Setting global spooler options for print jobs and spool queues

Click on the **Settings** icon at the top right side of the Océ Server main screen to display a drop-down menu. Click on **Properties...** and the System Settings dialog box will open. Click on the **Print Spooler** tab within this dialog box.


System Settings
Message Logging
Button Bar
Memory Settings
Print Spooler
Network Printing & Control
Print Previews
Path to top level directory where the print spooler will store jobs:
D:\RIP1
Browse...
Create
Jobs for all queues are assigned printing priority by queue order.
Print spooler file deletion policy
Never delete jobs after printing.
Delete jobs after successful spool printing.
Delete inactive jobs older than
24:00
hours.
Ask for confirmation when jobs deleted via drag and drop.
Automatically start print spooler when RIP is started.
OK
Cancel
Help
This text area will display a brief help message describing each control in this dialog box.

The path to the current top level directory where the Océ Server print spooler stores jobs is displayed in the edit box beneath the first prompt within the Print Spooler tab (for example: **D:\RIP1**). The Océ Server automatically organizes this top level directory to store the jobs in their appropriate spool queues.

You can create a new top level directory by typing the new path in the edit box and clicking on the **Create** button. The Océ Server will begin using the new directory when you exit the System Settings dialog window by clicking on the **OK** button to save and use your settings.

Click on the **Browse** button to browse your network, for example, to see if a particular top level directory has already been created.

Assigning printing priority by queue order Each time you add a spool queue, the Print Queue icon for that queue is added along the Print Queue Icon Bar to the right of any existing icon(s). A maximum of seven icons are displayed along the top row of the Bar before a second row is started, with any

subsequent icons again ordered from left to right. This means that the icon on the far left end of the top row of the Print Queue Icon Bar represents the output device for spool queue 1. The next icon along the top row represents the output device for spool queue 2 and so on, up through spool queue 14.

Checking the **Jobs for all queues are assigned printing priority by queue order** checkbox means that jobs sent to spool queues will be positioned in the Active Jobs List according to their spool queue number. For example, if a job is sent to spool queue 3, it will appear in the Active Jobs List below any jobs sent to spool queues 1 and 2, but above any jobs sent to spool queues 4 and 5. When the checkbox is not checked, all jobs will appear in the Active Jobs List in the order in which they are picked up by the Océ Server.

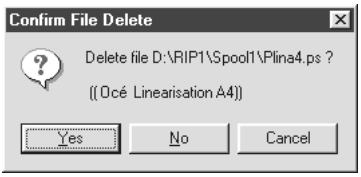
Print spooler file deletion policy The matter of when to delete files that have been successfully printed is always important in relation to the amount of hard disk space available to you. This section of the Print Spooler tab offers you three mutually exclusive options:

Click on the checkbox beside the **Never delete jobs after printing** option if you wish the Océ Server to store all jobs in the Inactive Jobs List once they have been printed.

Click on the checkbox beside the **Delete jobs after successful spool printing** option if you wish the Océ Server to delete such jobs instead of storing them in the Inactive Jobs List.

Click on the checkbox beside the **Delete inactive jobs older than** option if you wish to specify a time period for the Océ Server to store all jobs in the Inactive Jobs List once they have been printed before deleting them. When you check this option, the edit box on the right side of the option becomes active for you to enter a time period defined in hours. For example, entering 24.00 in this edit box will cause the Océ Server to store printed jobs for twenty-four hours before deleting them.

Jobs which appear in the Active or the Inactive Jobs Lists can always be deleted by dragging and dropping them on to the Toilet icon.



Check the **Ask for confirmation when jobs deleted via drag and drop** checkbox to display a Confirm File Delete dialog box when a job is about to be deleted in this way.

To save and use any settings that you enter in the Print Spooler tab, click on the **OK** button at the bottom of the tab.

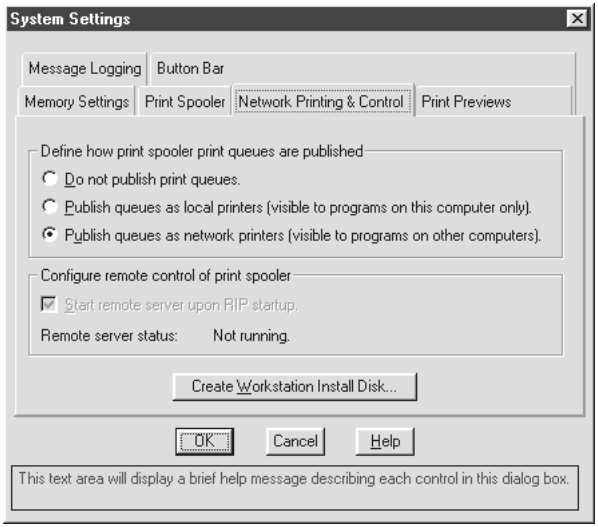
Publishing spool queues

The Océ Server automatically assigns a spool queue to each output device represented by an icon in the Print Queue Icon Bar. When you set up a spool queue, by default the Server also creates the queue in the **Printers** folder accessed via Settings from the Start menu.

To specify the way in which your spool queues are created:

Click on the **Settings** icon and select **Properties...** to open the System Settings dialog box.

Click on the **Network Printing & Control** tab.


System Settings
Message Logging
Button Bar
Memory Settings
Print Spooler
Network Printing & Control
Print Previews
Define how print spooler print queues are published
Do not publish print queues.
Publish queues as local printers (visible to programs on this computer only).
Publish queues as network printers (visible to programs on other computers).
Configure remote control of print spooler
Start remote server upon RIP startup.
Remote server status: Not running.
Create Workstation Install Disk...
OK
Cancel
Help
This text area will display a brief help message describing each control in this dialog box.

Checking the first option, **Do not publish print queues**, means that spool queues set up within the Océ Server will not be created in the Printers folder.

Checking the second option, **Publish queues as local printers**, means that spool queues set up within the Océ Server will be created in the Printers folder, but will not be shared. This option is more applicable if you are running the Océ Server on a stand-alone system as opposed to on a network.

Checking the third option, **Publish queues as network printers**, means that spool queues set up within the Océ Server will be created in the Printers folder as shared, ready for use by other users on your network.

Chapter 5
Advanced Features

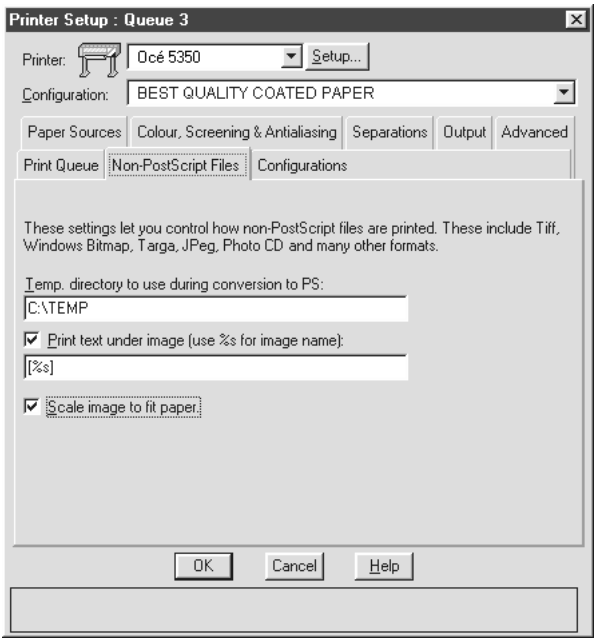
This chapter describes some of the advanced features of Océ Graphics Server:
•printing bitmap files
•setting output options
•using Reprint to print copies
•managing separations
•printing epilogue pages
•running Océ Server macros
•using interactive mode

Printing bitmap files

The Océ Server does not only print PostScript files. You can also use it to print your bitmap files, such as TIFF, BMP and PCD files. Refer to the online help for the list of valid file types.

▼ **To print a non-PostScript file**

1. Click on the Print Queue icon representing the printer you wish to print your bitmap files to and select **Properties** from the drop-down menu.
   The Printer Setup dialog box will open.
2. Click on the Non-PostScript Files tab within the Printer Setup dialog box to enable you to specify settings which are of particular use when printing bitmap files (for example, scanned photographs).



The Océ Server uses a temporary directory when interpreting and printing bitmap files. Type the path and name of the directory you would like the Server to use in the edit box beneath the prompt **Temp. directory to use during conversion to PS:**. Because bitmap files tend to be large, the drive you specify should ideally the one on which you have the most available free disk space. Also, any temporary directory specified must actually exist.

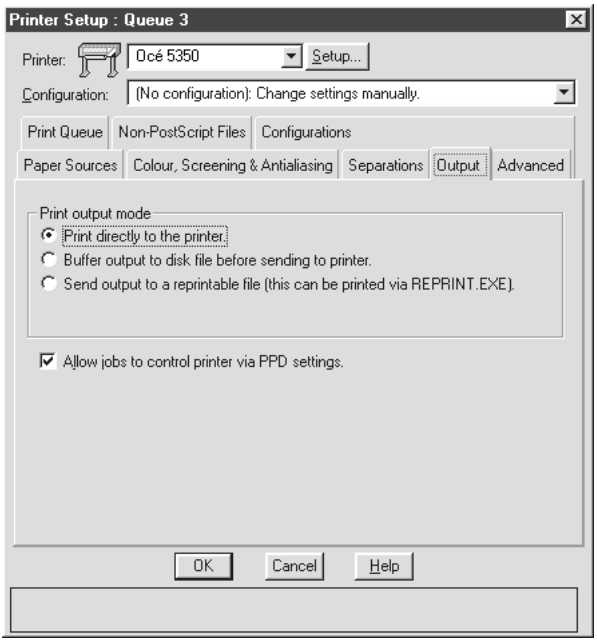
Use the **Print text under image [use %s for image name]:** edit box to print the name of your file and/or a title beneath the image. To print the file name, leave the default setting %s in the box below the prompt. To print the file name and a title, type the title in the box and retain the default %s. To print only a title, delete the default %s and type the title.

To enlarge your image to fit the paper currently specified for your printer, check the **Scale image to fit paper** checkbox. For example, if your printer has a 36" paper roll and your image is A3 size, checking **the Scale image to fit paper** checkbox will scale your print to 36" wide. If you do not check the box, your image will be printed pixel by pixel on the paper.

Note: *This example applies only if the Use Page Positioning option is unchecked in the Paper Sources tab when configuring your printer setup. If Use Page Positioning is checked, then the Scale image to fit paper option will enlarge the image to fit the paper format selected in the setup.*

Setting output options

Click on the **Output** tab within the Printer Setup dialog box.



The options listed in the 'Print output mode' of this tab are mutually exclusive. Check the radio button for the appropriate option to specify where the Océ Server will print the jobs for the selected spool queue.

Selecting the **Print directly to the printer** radio button will cause the Océ Server to print your jobs directly to the printer to which the selected spool queue is assigned.

Selecting the **Buffer output to disk file before sending to printer** radio button will cause the Océ Server to first print your jobs to a disk file, and then print the image from disk to the printer.

Selecting the **Send output to a reprintable file** radio button will cause the Océ Server to send your job to a printable file on disk instead of directly to a printer. As with the 'Buffer output to disk file before sending to printer' option, when you select the **Send output to a reprintable file** radio button, the additional

prompt, edit box and Browse button are displayed for you to select and specify the location for saving the file. Make sure that you have enough disk space in that location, as the reprint file is a bitmap and will therefore be very large.

Sending your Océ Server output to a printable file instead of directly to your printer means that you can then print the file using the Server Reprint program, and get reprints without having to reinterpret the PostScript file each time.

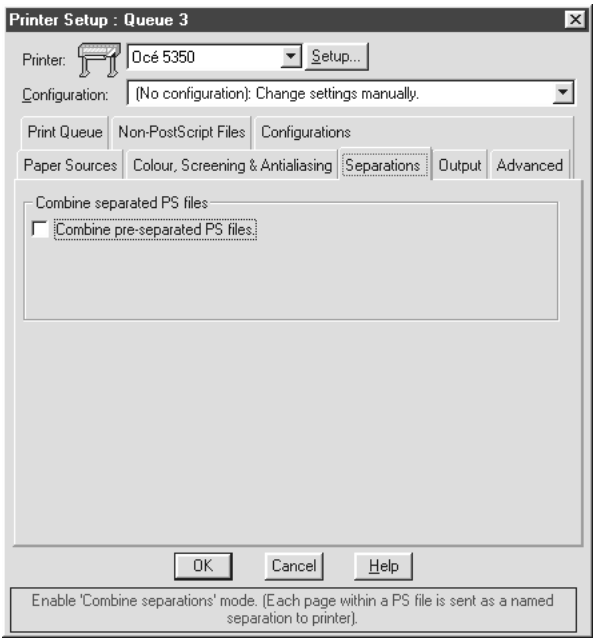
Once you have your bitmap file, you can launch the Reprint program from the **Reprint** button in the Server main screen.

Beneath the 'Print output mode' section of the tab is a prompt to **Allow jobs to control printer via PPD settings**. Checking the checkbox beside this prompt means that settings contained in individual PostScript jobs will apply to those jobs, as opposed to the settings specified for the printer via the **Setup...** button at the top of the Printer Setup dialog box.

Working with separations

The Océ Server can merge preseparated PostScript files (often referred to as EPSF 5 or DCS files) into a composite image. These files are usually intended to be output on a monochrome device, such as an imagesetter. This makes the Océ Server an ideal color proofer for imagesetter output.

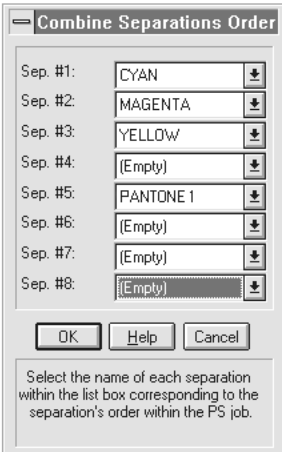
Click on the **Separations** tab within the Printer Setup dialog box.



Check the **Combine pre-separated PS files** checkbox. The Océ Server can merge up to eight separations, for example the four process colors and up to four spot colors. (You can also use this feature to see the effects of any trapping and overprinting effects. Print the file as separations from the application, then merge them using this feature.)

When you check the **Combine pre-separated PS files** option, the following two additional controls appear:

Automatically determine order of separations Check this prompt when you want the Océ Server to detect the order of separations.



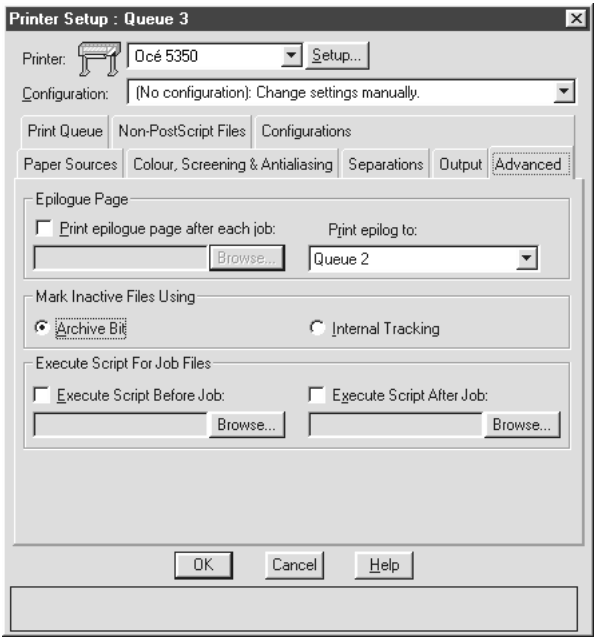
Select default order of separation plates… Click on this button when you want to manually specify the order via the Combine Separations Order dialog box.

Note: *If you select the 'Send output to a reprintable file' radio button in the Output tab, the Océ Server Reprint program is responsible for combining separations.*

Printing epilogue pages

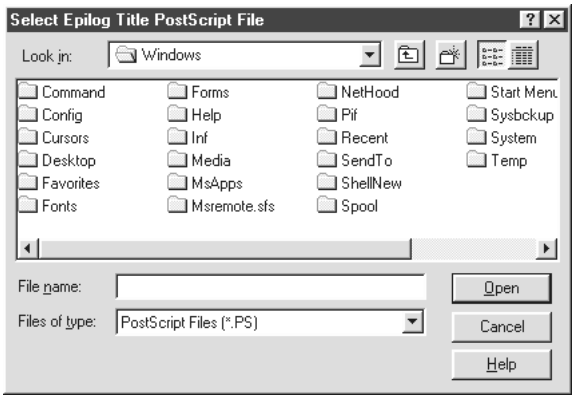
Océ Server has an option to allow you to print out epilogue pages. An epilogue page is a PostScript page which can print customer and job information such as a logo, file name, header, number of copies, etc. For example, the top half of the page can contain your own PostScript file, perhaps with your company logo and customer information. The bottom half of the page will consist of the header and print information of the job just printed.

Select the **Advanced** tab within the Printer Setup dialog box. The top section of this tab is headed Epilogue Page.

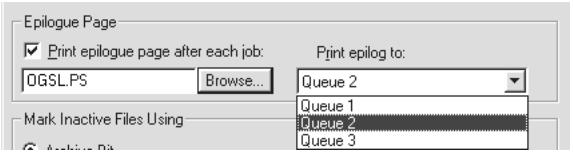


Checking the checkbox within the Epilogue Page section will cause the Océ Server to print an epilogue page after each job printed through that spool queue. The edit box and Browse button beneath the checkbox are both activated when you check it. The edit box displays the currently selected epilogue page file (a default epilogue page called WISPEPI.PS is supplied as part of your Océ Server package). Click on the **Browse** button to open the

Select Epilogue Title PostScript File window to locate and select an alternative epilogue page.



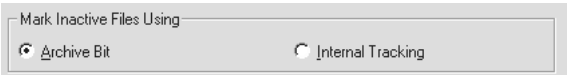
Click on the down arrow in the **Print Epilogue to** list box. A drop-down list of your current print queues will be displayed. Select the queue for the printer where you want the Océ Server to print the epilogue page.



Note: *Epilogue pages are not printed when you print a file that is already in the inactive queue.*

Marking files as inactive

Select the Advanced tab within the Printer Setup dialog box. The middle section of the tab is headed Mark Inactive Files Using.



The Océ Server identifies files to be added to the Inactive Job List through the archive bit being unset. If the archive bit is set, the file is active and if it is unset, the file is inactive.

The **Archive Bit** checkbox is for use on all systems except VMS and UNIX. Check this checkbox to retain archive bits even if your system crashes.

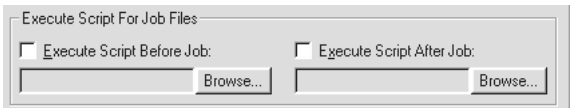
The **Internal Tracking** checkbox should be used on all operating systems that are **not** DOS- or Windows-based, such as UNIX and VMS. Checking the Internal Tracking checkbox will allow your jobs to move from the active to inactive queue and will retain settings as long as you shut down Windows correctly. If, however, for any reason the system crashes, the information relating to the jobs in a queue being active or inactive may be lost.

Using Océ Server macros while printing

The Océ Server supports the running of the Océ Server macro files (scripts) on a queue. Scripts take precedence over any print settings and the name of the file running on the queue can be passed to the script. See the Océ Server Macro Language section below for more information on building and running macros and scripts with the Océ Server.

▼ **To run a macro script**

1 Select the **Advanced** tab within the Printer Setup dialog box. The bottom section of the tab is headed Execute Script for Job Files.



2 Check the **Execute Script Before Job**: prompt and enter the path and name of a script file to run a script before each job in the queue.
or
Check the **Execute Script After Job:** prompt and enter the path and name of a script file to run a script after each job in the queue.

3 Click on the appropriate **Browse** button to open the **Select Script File** window to locate and select an Océ Server script file.

Océ Server Macro Language

This macro language provides a set of commands that access commonly used functions in the Océ Server. By linking macro language commands with button bar buttons, you can configure these to perform most actions. Macro commands can also be linked to the main menu bar items, or executed automatically from a file called **AUTOEXEC.MAC** at Server startup.

Commands in the macro language are called functions. Each function has a unique name and may take one or more parameters. Function names are always followed by a pair of parentheses, i.e. the characters ‘(’ and ‘)’. Any parameters for the function appear inside these parentheses. For example, to execute the function ‘Print’ (which prints a PostScript file) and pass it the name of the file to print, TEST.PS, as a parameter, you would enter the following text:

Print(TEST.PS)

If a function takes more than one parameter, you can separate individual parameters with comma ‘,’ or space ‘ ’ characters. ‘Print’ takes an optional second parameter, which can be 1 to print files as EPS files, or 0 to print them as normal PS files. To print TEST.PS as an EPS file, you would enter the text:

Print(TEST.PS,1)

For single parameters which may contain spaces, you should enclose the entire parameter within double quote “ ” characters. The function ‘Show’ displays a test string in a box. To get it to display the text ‘Hello World!’, you would enter:

Show(“Hello World!”)

Functions may also return values, which can be passed as parameters to other functions. For example, the function ‘GetFileName’ displays a file selection dialog box, and if the user selects a file and presses OK, returns the file’s name as the return value. To prompt the user for a file and print it, you would enter:

Print(GetFileName())

Instead of passing the text ‘GetFileName()’ to Print as a parameter, the Océ Server will first execute the function GetFileName (with no parameters, hence the ‘()’ characters) and pass the returned value to Print as a parameter.

Sometimes, you may want to pass functions to other functions as parameters, instead of their return values. To do this, enclose the functions to be passed as parameters within braces , i.e. the characters ‘{’ and ‘}’. In the following example, the function ‘YesNo’ displays its parameter as a prompt in a dialog box that has two buttons, **Yes** and **No**. It returns 0 if **No** is pressed, or 1 if **Yes** is pressed. The function ‘If’ takes two parameters. If the first parameter is not 0, it executes the second parameter, or else it does not:

If (YesNo(“Print the file TEST.PS ?”) , { Print(TEST.PS) })

1 The Océ Server executes the function YesNo(“Print the file TEST.PS ?”).

2 If the user enters **Yes**, the function returns value 1 and continues to the function Print(TEST.PS).

3 If user enters **No**, the function returns 0 and none of the functions and parameters within '{' and '}' can execute.
Note: *More than one parameter or function can exist within '{' and '}'. Everything executes as a single function.*
Functions can be executed one after another in the same macro by separating them with spaces or semicolon ';' characters. For example, the following function first previews the file, then prints it:

Preview(TEST.PS); Print(TEST.PS);

A useful function to execute before others is 'TraceErrors'. If you pass it a parameter of 1, any errors encountered are shown in a message box, along with the name of the function in which the error occurred. Passing 0 as a parameter will turn off error tracing.

AUTOEXEC.MAC is a file located in the same directory that contains the WISPPS.EXE file (usually within the **\WISPPS\BINx** directory). It is executed whenever the Océ Server is started up. You can put the Server Macro Language commands within this file to autoconfigure the Server on startup.

See the section 'Macro language command index' on page 128 for a list of all the Océ Server Macro Language functions.

Interactive mode

Interactive mode allows you to type in and send PostScript commands to Océ Server. This feature is particularly useful for troubleshooting problems.

Displaying the transcript window

The section of the Océ Server main screen that displays the Active and the Inactive Job Lists is also used for the Transcript Window display. You can choose to display the Transcript Window to show any messages generated by the Océ Server as it interprets and prints your jobs, instead of displaying the Active and the Inactive Job Lists.

▼ **To display the transcript window**

- From the **View** menu, choose **View Transcript Window.**

The screen display will change from the Active/Inactive Job Lists to the Transcript Window. When the Transcript Window is displayed on your screen, the View menu option to View Transcript Window is replaced by the View Spool Queue Window option. Select **View Spool Queue Window** to replace the Transcript Window with the Active and the Inactive Jobs Lists on your screen.

Using interactive mode

The View menu also has an **Interactive Mode** option. Selecting this option when the Server spooler is not running and the Transcript Window is displayed, causes a PS> prompt to appear in the Transcript Window. You can then type PostScript commands at this prompt and your command(s) will be sent to the Océ Server when you press the **Enter** key. Use the **Backspace** key to delete and correct errors.

Note: *The Océ Server will automatically cancel interactive mode when you redisplay the Active and the Inactive Job Lists on your screen by selecting the View Spool Queue window option from the View menu.*

Select the **View Errors** option from the View menu to open a window on your screen which displays error information (if any) for the last job printed. You

can also open this window by clicking on the **Error** button on the Server Status Bar (**8**).

If you have a problem printing an individual PostScript file, you can select the **Enable PostScript Command Output** from the View menu, send the job to the printer, and then view the Transcript Window. Comments about the job will appear in the Transcript Window. Here is part of a sample comment output:

(BeginSetup)

(EndSetup)

(IncludeFont: Symbol)

(IncludeFont: TimesNewRomanPS)

(IncludeFont: Univers-BoldOblique)

(IncludeFont: Univers-Bold)

These comments can often help you to determine the cause of the problem.

For example, if the Océ Server fails to print a job and the last comment is (IncludeFont: Univers-Bold), it may be that the Océ Server cannot find this font or a substitution for it. Try changing Univers-Bold to another font and then see if the job prints.

In addition to displaying the comments in the Transcript Window, selecting Enable PostScript Comment Output will also cause the Océ Server to record all job processing comments in the current log file. This means the log file will grow in size very quickly. To disable the comment output, select **Disable PostScript Comment Output** from the View menu.

Chapter 6
Previewing

Océ Graphics Server L allows you to preview a job to your printer to see what a final printout will look like without actually printing the job on paper.

Previewing a job to a printer

When you select a PostScript file to preview, the Océ Server looks at the current printer to determine printer-independent issues such as which paper is in use, the dimensions, the unprintable area of the paper, and whether or not halftoning is required. It then passes this information, along with an image of the final page, to the Océ Server file Previewer.

Your image is displayed on screen in the Previewer. The Océ Server also keeps the image in memory, allowing you to scroll up and down to view different parts of a page. Because of this, a very large image created by the Server may consume a large amount of memory.

Previewing jobs in a spool queue

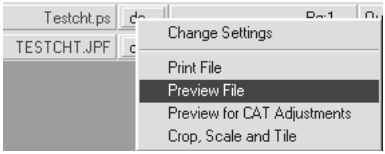
When the job you wish to preview is in a spool queue, it will be stored in either the Active or the Inactive Jobs List. You then have three ways of previewing it:

▼ **Dragging and dropping (for files in the active or inactive spool queue)**

1. Select the job you wish to preview by clicking on it.
2. Hold down the **Shift** key and drag and drop the job onto the Print queue icon representing the printer you want to preview the file to.

▼ **Using the do... button (for files in the inactive spool queue)**

1. Click on the **do...** button beside the name of the job you wish to preview.
2. Select **Preview File** from the **do...** button drop-down menu.



The Océ Server will preview that job to the printer for which the job is queued.

▼ **Using the Preview File button (for files stored on your hard disk)**

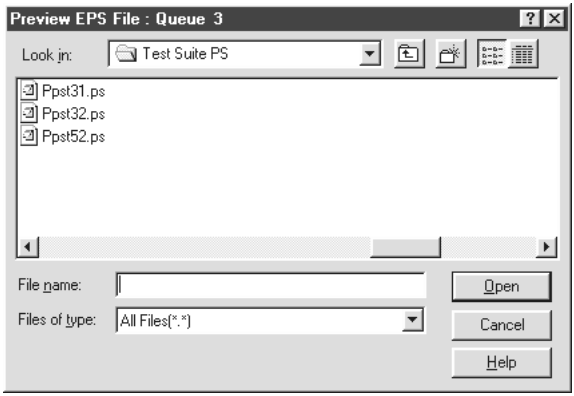
1. Select the job you wish to preview by clicking on it.
2. Click on the **Preview File** button in the Océ Server Button Bar. The Server will preview that job to the selected printer.

Previewing jobs not in a spool queue

When there is a PostScript file elsewhere on the network that you wish to preview, you can still find and preview it from within the Server main screen.

▼ **Using the Print Queue icon**

1. Click on the Print Queue icon representing the printer you wish to preview the file to, and then select Preview File from the drop-down menu.
   A Preview EPS File dialog window will open.



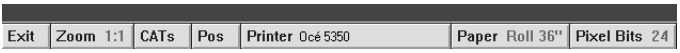
2. Locate and specify the file you wish to preview.
3. Click on the **Open** button within the Preview EPS File window and the Océ Server will preview the file to your printer.

▼ **Using the Preview File button**

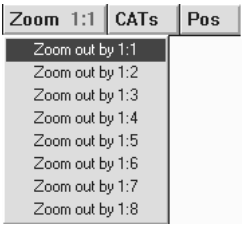
1. Make sure there are no jobs highlighted in the Active and Inactive Jobs Lists.
2. Click on the Preview File button in the Server Button Bar.
   The Preview EPS File dialog window will open.
3. Locate and specify the file you wish to preview and click on the **Open** button display it.

What can I do in the Previewer?

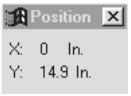
The Océ Server Previewer displays a Button and Information Bar across the top of the screen.



Zoom Button Click on the Zoom button to zoom in and out to the image.



You can also zoom in and out to the image by using the mouse. Click on the **left mouse button** to select the next zoom-in level and center the page image at the position of the mouse. **Click on the right mouse button** to zoom out to the previous level and center the page image in the preview window.



POS button Click on this button to hide or show the Position box.

This box indicates the exact placement of your mouse pointer.

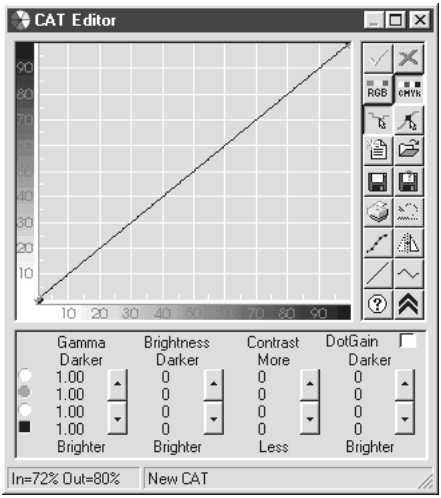
Printer The name of the printer for which the preview page was created is displayed next to this heading on the Preview Button and Information Bar.

Paper The paper for which the preview page was created is displayed next to this heading on the Preview Button and Information Bar. The paper for which the preview page was created is the paper currently selected as Paper Source 1: in the Paper Source tab within the Printer Setup: dialog box.

Pixel Bits The bits per pixel for the preview page image is shown next to this heading on the Preview Button and Information Bar. The number of bits per pixel depends upon the type of preview you have selected.

CATs button Depending upon your global preview settings, a CATs button may also be displayed on the Preview Button and Information Bar. (For further

details of these global preview settings please (see ‘Setting global preview options’ on page 79).) When the CATs button is displayed, you can carry out interactive color correction (CAT editing). Click on the CATs button to launch the CAT Editor.

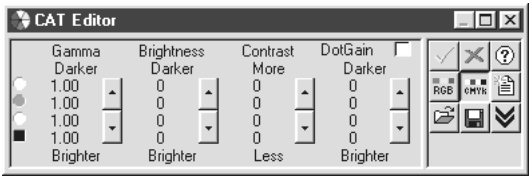


Note: *The Océ Server CAT Editor can also be launched in the Colour, Screening & Antialiasing tab within the Printer Setup: dialog box. However, launching the CAT Editor from within the Océ Server Previewer provides you with the following three additional buttons on the right side of the CAT Editor graph:*

Clicking on this button to select it will close the CAT Editor and save any changes you have made.

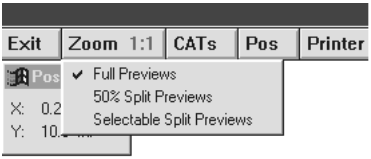
Clicking on this button to select it will close the CAT Editor without saving any changes made.

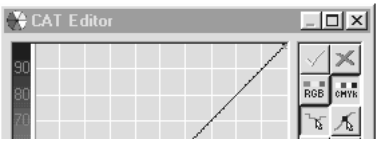
Clicking on this button to select it replaces the full version of the CAT Editor on screen with a reduced version for convenience in working.



Click on the button to restore the full version of the CAT Editor to your screen.

Click on the CATs button again in the Preview Button and Information Bar to allow for a choice of Full or Split Screen viewing.



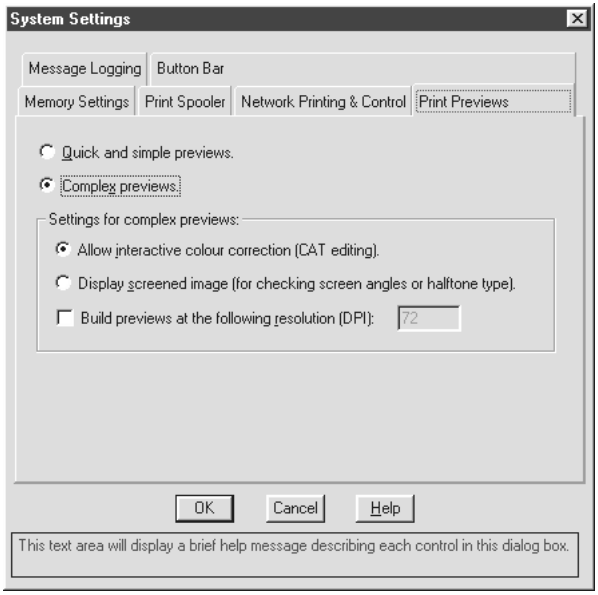


Changes you make here have no effect on the printed output unless you save them to a new CAT file or manually add your changes to the existing CAT you have set for that queue. (For more information on color control, see chapter 3, ‘Controlling Color & Print Quality’ on page 19.)

Exit Click on this button to exit the Previewer and return to the Océ Server main screen.

Setting global preview options

Click on the Settings icon at the top right side of the Océ Server main screen to display a **Properties**… menu option. Click on Properties… and the System Settings dialog box will open. Click on the **Print Previews** tab within this dialog box.



Check the **Quick and simple previews** checkbox to specify low resolution color previews for your print jobs. These previews use less memory.

Alternatively, checking the **Complex previews** checkbox will enable you to enter settings for complex previews. You can either enter a setting to allow color correction or to check image screening.

If you wish to be able to make color adjustments to your preview images and view the effects on screen, check the **Allow interactive colour correction (CAT editing)** checkbox. The CATs button will then appear on the Button and Information Bar within the Océ Server Previewer.

If you wish to view halftone types, for example, check the **Display screened image (for checking screen angles or halftone type)** checkbox.

(For more information on color control and screening, please see chapter 3, ‘Controlling Color & Print Quality’ on page 19.)

Selecting Complex previews also enables you to specify a resolution for preview images. Check the checkbox on the left side of the **Build previews at the following resolution (DPI):** prompt. You can then type the required number of dots per inch in the edit box to the right of the prompt.

Click on the **OK** button at the bottom of the Print Previews tab to save and use any settings made and close The System Settings dialog box.

Chapter 7
Managing Memory Settings

This chapter describes how Océ Graphics Server L deals with your computer's RAM memory.

Introduction

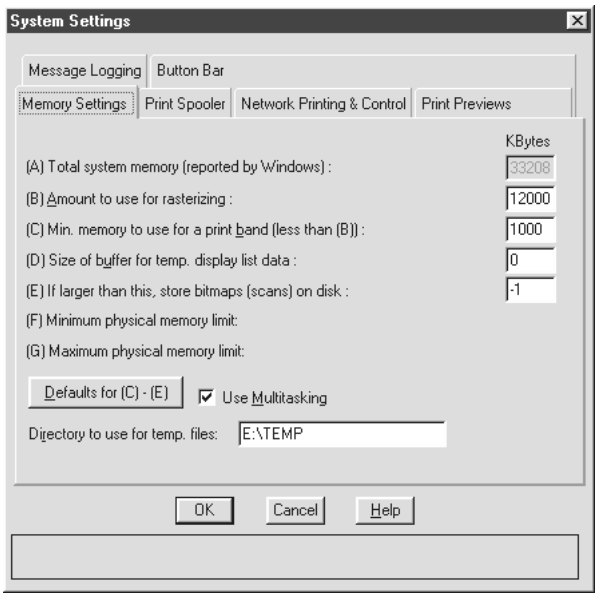
Memory settings control the way your computer's main memory (RAM) is used by the Océ Server.

During installation, the Océ Server sets default values for the memory settings based upon your total system memory (reported by Windows). To a certain extent, however, you can optimize the Server's behavior using these options. For example, if your system has a large amount of memory, you may wish to enable a multitasking buffer. This will allow the Server to continue rasterizing while your printer is receiving data from this buffer.

In order to print your files, the Server has to convert them to a form acceptable by your printer. This form is actually a bitmap, a pixel by pixel image that is built up in memory and then transferred to your printer. These bitmaps can occupy a large amount of memory and the Server uses two different methods to build them, depending upon their size. Memory settings tell the Server how much memory it can use when building bitmap files and printing them, thereby affecting the speed at which you obtain your prints.

Viewing memory settings

Click on the **Settings** icon at the top right side of the Océ Server main screen and select the **Properties...** menu option. The System Settings dialog box will open. Click on the **Memory Settings** tab within this dialog box.



Building bitmap files

The Océ Server uses two different methods to build bitmap files, depending upon their size.

Non-Banding (or Frame) Mode In this mode, the entire bitmap for a page is built and kept in memory. The Océ Server uses this mode if the amount of memory required for the page bitmap is less than the '(**B**) Amount to use for rasterizing:' setting specified in the Memory Settings tab. The PostScript file is converted directly into this bitmap. The main advantage of this mode is speed, especially when printing files with large scans in them.

Banding Mode If the Océ Server finds that the memory required for the page bitmap is too large to fit into its memory, it uses banding mode. In this mode, the Server first interprets your PostScript file, converting it into an intermediate format known as a 'display list'. Depending upon the settings in the Memory Settings tab, the Server then determines an optimum amount of memory to use for a subsection of the page bitmap, known as a band. It converts the part of the display list that overlaps this band into the band bitmap. This band of converted information is transferred to the printer as part of the page. The Server then converts the next band for the page into the same memory space that had been occupied by the previous band.

This mode has the advantage of using much less memory than non-banding mode. However, because the PostScript-to-bitmap conversion is now essentially a two-stage process, it may be considerably slower.

What do the memory settings mean?

(B) Amount to use for rasterizing Rasterizing is the process by which a PostScript file is converted into a bitmap image to be sent to the printer. The amount of memory specified here is used either to generate and store the entire page bitmap in non-banding mode, or is shared between the display list and the band bitmap in banding mode.

(C) Min. memory to use for a print band [less than (B)] This memory setting only has an effect during banding mode. It sets a lower limit to the amount of memory used for a band bitmap. If, during band mode interpretation, the Océ Server finds that the intermediate display list is occupying more space than (**C**) subtracted from (**B**), it will flush the display list to your hard disk and read it again during the banding phase. Reducing this memory option will increase the chances of the display list being kept in memory (and therefore executing faster). However, more bands must now be rendered over the same page, resulting in a reduction in speed. We recommend this amount be set to about half of the value set for (**B**), or 1MB, whichever is less.

(D) Size of buffer for temp. display list data This memory setting only has an effect during banding mode. While rendering from a display list on disk, this amount is used for buffering reads from disk. When this setting is zero, the Océ Server will choose a default value based on your operating system.

(E) If larger than this, store bitmaps (scans) on disk This memory setting only has an effect during banding mode. While interpreting PostScript files with bitmaps (scanned images) in them, the scans may be stored within the

display list, or they may be stored separately, on disk. This setting tells the Océ Server the size limit of scans saved within the display list. There are several things to consider here: A scan saved in the display list will be accessed quicker and rendered faster. However, it may make the display list larger, and more prone to being completely flushed to disk and therefore being executed much more slowly. The default setting is -1 for this option, which means it always saves scans separately on disk.

Defaults for (C) - (E) Clicking on this button causes the Océ Server to calculate defaults for the memory settings (**C**) through to (**E**).

Directory to use for temp. files The Océ Server uses this directory for temporary files during interpretation.

For example, during banding mode rasterizing, the display list and associated scans may be stored in this directory. Intermediate files produced during the interpretation phase may be quite large, so we recommend that you have at least 100MB free on the drive on which the temporary directory exists. The directory should be located on a different physical hard disk from the one that is used to read the PostScript files (i.e. the top level directory) where the print spooler will store jobs specified in the Print Spooler tab of the System Settings dialog box.

Use Multitasking Check this option to enable a multitasking buffer which allows the Océ Server to continue rasterizing while your output device is receiving data from this buffer. This allows input and output to overlap. If you are using a fast output device, you may not see an increase in performance. This will increase the Server's memory usage by about 1MB over the (**B**) setting.

Physical Memory Usage Minimum/Maximum physical memory limit.

A normal application running under Windows NT usually has 2MB of physical memory allocated to it. The application's demand for more memory is initially satisfied by the Windows NT Memory Manager via Windows virtual memory. As the application's memory usage increases, more physical memory is used to 'back up' this virtual memory. These two values tell the Windows NT Memory Manager how much physical memory to use to back up the Océ Server memory allocation.

The defaults for these values are -1 in each case, which means they are not used. The values should only be changed if you notice a lot of hard disk activity when the Server is sending data to the printer. This may cause banding on the output. Configure the values at 8000K and 12000K, respectively, and observe the hard disk activity. Set them to 12000K and 15000K if it is still noticeable, and so on in upward increments.

For an Océ Server with at least 64MB of RAM, the Windows NT Memory Manager provides each application with more memory to begin with and so there is less need for this feature. In this case, leave both values at their default values of -1. This means that the Server's memory requirements will grow arbitrarily until Windows memory (either real or virtual) has been exceeded.

Chapter 8
Troubleshooting

This chapter is to help you deal with some of the most common problems you may encounter while using Océ Graphics Server L.

PostScript error messages

Errors generated by PostScript files are trapped by the Océ Server and can either be written to a log file or displayed on screen. PostScript error messages tend to be somewhat cryptic unless you are a PostScript expert, so we have translated them into plain English.

Error: “undefined”

Explanation: If an application has a native language other than PostScript (e.g. QuickDraw on the Macintosh), then each application has its own dictionary or header file that contains translations of application-specific drawing commands into PostScript-specific drawing commands. For example, the QuickDraw command FrameRect is equivalent to the PostScript command lineto executed four times, once for each side of the rectangle. The dictionary (or header) is downloaded with the PostScript file so that the RIP can interpret such commands correctly.

Reason: If the PostScript file was saved to disk with a header, then the RIP should have no difficulty in processing the file, as the header information required to translate the PostScript has been incorporated in the file. However, if the file was saved without the header, then the successful execution of the file will depend on whether the correct header is resident in the RIP. (This is unlikely, as few items can be permanently downloaded to the RIP.) If the correct header is present, the entire file should execute normally. If it is not, when you send the file to the RIP, you will receive a ‘%%[Error: undefined;...’ PostScript error message. Generally, the header contains the dictionary for the PostScript file and so the first part of this error message will often be followed by a message giving a clue as to which header is missing. For example, ‘%% [Error: undefined; OffendingCommand: md] %%’ if the Apple Dictionary is missing, or ‘%% [Error: undefined; OffendingCommand: AldusDict] %%’ if it is the Aldus dictionary.

Solution: Some applications have a 'Download Header' check box to include the header. The Microsoft PostScript driver for Windows has a 'Send Header...' option, and the Adobe PostScript Driver for Windows has a 'Download Header' option in the 'Job Control' section. Search your particular application and/or PostScript driver for such options and make them active where appropriate.

Error: “configurationerror”

Explanation: The printer configuration requested by a PostScript job could not be satisfied.

Reason: If this error occurred during printer selection, you may not have enough memory or disk space available. If the error occurred during print job execution, the job may be requesting a paper type that is not available, or a print resolution that is not supported.

Solution: Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job.

Error: “dictstackoverflow”

Explanation: The memory available to the dictionary stack has been exceeded.

Reason: Under normal circumstances, this is very unlikely to happen for a correctly formed PostScript job, as the memory available to the dictionary stack is much larger with the RIP than it should ever need to be. This is probably caused by a corrupt PostScript file or an interpreter-dependent file header.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size), and resend the job. If the error persists, then contact your supplier.

Error: “dictstackunderflow”

Explanation: An attempt has been made to remove the last element from the dictionary stack when it was already empty.

Reason: Under normal circumstances, this is very unlikely to happen for a correctly formed PostScript job. This is probably caused by a corrupt PostScript file or an interpreter-dependent file header.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “execstackoverflow”

Explanation: The execution stack has grown too large, exceeding the memory available to it.

Reason: Under normal circumstances, this is very unlikely to happen for a correctly formed PostScript job, as the memory available to the execution stack is much larger with the RIP than it should ever need to be. This is probably caused by a corrupt PostScript file or an interpreter-dependent file header.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “tinterrupt”

Explanation: An interrupt such as the receipt of a control-C character from the communications channel has been performed while interpreting the file.

Reason: Under normal circumstances, this is very unlikely to happen unless a user has manually interrupted the printing process or unless Windows has caused the interpreter to crash.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “sinvalidaccess”

Explanation: The PostScript file has tried to access global rather than local memory.

Reason: This error may be caused by not enough VM (Virtual Memory) or by a corrupt font.

Solution:
Reboot the RIP. The RIP should always be restarted if this error occurs as all subsequent files to be interpreted will be affected. Make sure that you are using the correct PPD file from the Printer Drivers disk for the platform and operating system that you are using.

Error: “itinvalidexit”

Explanation: The PostScript job tried to exit a loop while it was not actually in a loop.

Reason: Under normal circumstances, this is very unlikely to happen unless the PostScript file is corrupt.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “invalidfileaccess”

Explanation: The PostScript interpreter tried to read or write to a file or font that did not exist or was read-only.

Reason: This error is most likely to occur in network environments where the RIP does not have all access privileges set, or the fonts are already in use by another file, are corrupt or their paths are incorrectly mapped.

Solution: Make sure that you have given all network privileges to the network spooling directory and that none of the fonts are missing or in use by another computer (this is only possible in font sharing environments). Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “invalidfont”

Explanation: This error is often followed by ‘...OffendingCommand: setfont] %%’, ‘...OffendingCommand: makefont] %%’ or ‘...OffendingCommand: setfont] %%’, and means that the font asked for by the PostScript file could not be accessed.

Reason: The main reason for this error is that only the screen font was available to the type manager handling your fonts. When the PostScript file was generated it could not find the outline (printer) font file to include with the PostScript file so assumed it was already resident on the RIP. However, the RIP is supplied with the standard 'LaserWriter Plus' set of 35 fonts. Therefore, when it is requested to load a non-resident font, an invalidfont error is reported.

Solution: The easiest solution is to verify the location and validity of the font in question. Delete the fonts one at a time from the job and resend it to determine which font is causing the problem. Then, reload that font onto your system and ensure that it is seen by your type manager. Finally, resend the complete file and your problem should be solved. However, if you don't have access to the application that created the PostScript file, then you could try

substituting the font on the interpreter (if you know which font it is). Consult your supplier for details on to how to do this.

Error: “invalidrestore”

Explanation: An improper restore operator has been encountered in the PostScript file, which would cause certain data on the dictionary, execution or operand stacks to become corrupted.

Reason: Under normal circumstances, this is very unlikely to happen unless the PostScript file has been corrupted in some way.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “ioerror”

Explanation: An exception other than the end-of-file has occurred. You may have run out of disk space, making the job incomplete, or a file expected by the print job (such as a Level 2 resource) may not be present on the system. If there is also a Wnnnn error (where nnnn is a four-digit number), this may indicate that the printer device driver has failed to execute correctly.

Reason: The error may be caused by a problem with the printer, either because it was switched off, in a paused state, or the cable to the printer was not connected. In the case of a SCSI device, its SCSI ID may have been set incorrectly. Another possible cause for the error is a broken network connection that may have occurred as the file was being sent, or it may be that the interpreter tried to write to a file that was already closed.

Solution: The RIP first interprets the file and then sends it to the printer, so this error is only likely to occur at the end of the interpreting pass or the beginning of the pass that sends data to the printer. This means that the PostScript file has been successfully sent. Find out the cause of the problem with the printer by noting what is in the Printer Driver Error section of the Error dialogue box and then resending your file.

Error: “limitcheck”

Explanation: An implementation limit within the interpreter has been exceeded (for example, too many files have been opened simultaneously or a PostScript path has become too complex).

Reason: This is more likely to have occurred because of a very complex vector or clipping path being generated in an application such as Illustrator or PhotoShop.

Solution: There are two possible solutions: try tracking down the path that is causing the problem by removing complex paths one at a time from the file and seeing if it will then run through the interpreter with no errors. Once you have located the problem path, go back to the application that created it and reduce the number of control points in the path. In some applications such as FreeHand there is an option in the print dialogue box to split complex paths; this may be a quick and easy solution if your application supports this option. If you cannot locate the problem path, try giving the interpreter more memory to work with. You can do this in the RIP by going into the Memory Settings tab within the System Settings dialog box and setting a lower value for option B (amount to use for rasterizing). This should free up some memory for the interpreter to build more complex paths.

Error: “nocurrentpoint”

Explanation: The PostScript file has tried to draw a line from point A to point B, but point A doesn't exist. This error may occur when drawing vector images or rendering fonts.

Reason: Under normal circumstances, this is very unlikely to happen unless the PostScript file is corrupt.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “rangecheck”

Explanation: The PostScript file has tried to set an operand to be outside the range acceptable to the operator. For example, it tried to access element 11 in a 10-element array.

Reason: Under normal circumstances, this is very unlikely to happen unless the PostScript file is corrupt or interpreter-dependent.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “stackoverflow”

Explanation: The operand stack has grown too large, exceeding the amount of memory available to it.

Reason: Under normal circumstances, this is very unlikely to happen for a correctly formed PostScript job, as the memory available to the operand stack is much larger with the RIP than it should ever need to be. This is probably caused by a corrupt PostScript file or an interpreter-dependent file header.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “stackunderflow”

Explanation: An attempt has been made to remove an object from the operand stack when it was already empty.

Reason: Under normal circumstances, this is very unlikely to happen for a correctly formed PostScript job, as an object would not be removed from the stack unless it was there in the first place. This is probably caused by a corrupt PostScript file or an interpreter-dependent file header.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “syntaxerror”

Explanation: The PostScript file contains a command that is not correctly formed PostScript.

Reason: Under normal circumstances, this is very unlikely to happen for a correctly formed PostScript job. A possible cause is a faulty network connection causing odd amounts of data to be lost. This error may also occur when binary data has been corrupted, such as that found in images. A notorious culprit is converting images from Macintosh to UNIX format and vice-versa, which often converts linefeed characters into carriage return-linefeed, thus corrupting the image.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. Ensure that the images are not corrupted. If the error persists, then contact your supplier.

Error: “timeout”

Explanation: The interpreter timed out while trying to execute a particular function.

Reason: Under normal circumstances, this is very unlikely to happen for a correctly formed PostScript job. It is probably caused by a corrupt PostScript file or an interpreter-dependent or missing file header.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “typecheck”

Explanation: An incorrect type of operand was passed to a PostScript operator, for example an integer instead of a string was passed to the show operator.

Reason: Under normal circumstances, this is very unlikely to happen for a correctly formed PostScript job. It is probably caused by a corrupt PostScript file or an interpreter-dependent or missing file header.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “undefinedfilename”

Explanation: The PostScript file tried to find a font or other file that did not exist or was corrupt.

Reason: This error is most likely to occur when the requested font or other file is corrupt or missing.

Solution: Make sure that none of the fonts or other files are missing, in use by another computer or corrupt. Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “undefinedresource”

Explanation: The PostScript file tried to find a predefined resource that did not exist. In Level 2 PostScript, the fonts are classed as resources and so this error may also occur if the font does not exist.

Reason: This error is most likely to occur when the predefined font or other resource is corrupt or missing.

Solution: Make sure that none of the fonts or other resources are missing, in use by another computer or corrupt. Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “tundefinedresult”

Explanation: This error is caused by an incorrect mathematical operation in the PostScript file that would produce a meaningless result, or one that cannot be represented by a number (for example, division by zero).

Reason: Under normal circumstances, this is very unlikely to happen unless the PostScript file is corrupt or is interpreter-dependent.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. If the error persists, then contact your supplier.

Error: “unimplemented”

Explanation: This PostScript function has not been implemented on this version of the RIP.

Reason: Some very specialized functions have not yet been implemented on the RIP. Though these are very few in number, you may have managed to find one.

Solution: Record the information in the error box and send this with the PostScript file to your Océ representative for assistance. If there is already an upgrade that includes this function, your supplier will know and can offer assistance as to how to upgrade.

Error: “unregistered”

Explanation: This is an internal interpreter error.

Reason: This should never occur, but if it does, then it is most likely a bug in the interpreter. Though these are very few in number, you may have managed to find one.

Solution: Record the information in the error box and send this with the PostScript file to your Océ representative for assistance. If there is already an upgrade that includes a fix or workaround, your supplier will know and can offer assistance as to how to upgrade.

Error: “unmatchedmark”

Explanation: The interpreter tried to find a mark object on the operand stack, but none was present. Examples of operators requiring mark objects are:], >> and cleartomark.

Reason: Under normal circumstances, this is very unlikely to happen for a correctly formed PostScript job. A possible cause is a faulty network connection causing data to be lost. This error may also occur when binary data has been corrupted, such as that found in images. A notorious culprit is converting images from Macintosh to UNIX format and vice-versa, which often converts linefeed characters into carriage return-linefeed, thus corrupting the image.

Solution: Restart the RIP. Make sure that you have selected the correct parameters on your printer setup (for example: printer type, resolution, lpi and paper size) and resend the job. Ensure that the images are not corrupted. If the error persists, then contact your supplier.

Error: VMerror

Explanation: A PostScript virtual memory error occurred.

Reason: This error may be caused by the RIP being unable to access the 'Directory to use for temp. files' setting from the Memory Settings tab within the System Settings dialog box. The error can also be caused by the temporary directory being set correctly, but to a root directory (for example, D:\).

Solution: Create a new temporary directory on a disk or partition with plenty of free space and set the 'Directory to use for temp. files' in the Memory Settings tab to this directory. Try giving more virtual memory to the RIP by increasing the difference between the (A) and (B) settings in the Memory Settings tab.

Océ Server error messages

Error: “UserAbort”

User signalled an abort, causing the print job to be discarded.

Error: “W1000”

Explanation: Data transfer to driver failed.

Reason: While printing, the printer driver signalled an error to the RIP.

Solution: If there is also a Driver Error, the information displayed here may indicate the exact nature of the error.

Error: “W1010”

Explanation: Driver initialization failed.

Reason: The RIP could not initialize the device driver for your printer.

Solution: Try restarting Windows.

Error: “W1020”

Explanation: Driver launch failed.

Reason: The RIP could not start up the device driver for your printer.

Solution: Make sure the printer driver is in the \WISPPS\BINx directory. Also try restarting Windows.

Error: “W1023”

Explanation: Reprint file creation failed.

Reason: The RIP could not create the files required by the Reprint application.

Solution: Make sure that there is a directory called REPRINT on the hard disk, and that the disk has plenty of free space. Reprint files are in a form specific to each printer, but they can be very large.

Error: “W1030”

Explanation: Driver synchronization phase failed.

Reason: The RIP could not initialize the device driver for your printer. A printer or printer driver error may have occurred during initialization. The printer has no paper, no ink or there is a problem with the interface between the RIP and printer.

Solution: If a Driver Error is also reported, this may indicate the exact nature of the problem. Also try restarting Windows.

Error: “W1040”

Explanation: Transfer memory allocation failed.

Reason: There may be no more memory available.

Solution: Try restarting Windows, then the RIP.

Error: “W1050”

Explanation: Transfer memory alias creation failed.

Reason: There may be no more memory available.

Solution: Try restarting Windows, then the RIP.

Error: “W9000”

Explanation: No paper trays installed in printer.

Reason: Before printing a job, the printer informed the RIP that no paper trays were installed and so the job was not printed.

Solution: Make sure that all the paper trays are pushed firmly into place on the printer.

PostScript tips

Three Common Don'ts in the PostScript World

1. Don't cover a mess on a document with a white rectangle! Clean up the mess by deleting it, or start a new file.
2. Putting files into one another is called nesting. Nesting files more than two levels deep is more likely than not going to cause trouble. It can also slow down the RIP.
3. Don't scale down graphics by large amounts, especially if they are photographs or illustrations with lots of curves or minute detail. This will require the RIP to down sample enormous amounts of data in order to reduce the size of the image. The RIP has to scale down the image while maintaining all the detail, even though it may be so tiny you can't see it on the printed page. For example, avoid shrinking a 16MB scan file to matchbox size!

   When you crop images on screen using the cropping tool, the RIP still has to build the total image and then throw away the parts you have cropped. This requires the RIP to perform a great deal of unnecessary work. Rather than crop images in your documents, edit them in your scanning or paint application prior to including them in your document. This will speed up RIP times.

   A good rule of thumb: simplify the graphic or, in the case of a scan, scan in the image at the correct resolution or down sample it before including it in the document. Note: If you wish to print a scan at 400dpi on a page and it is going to occupy a space 5" across, multiply 400 x 5 = 2000. Thus, 2000 is the maximum width in pixels of the scanned image.

Matching Fonts

If your file prints with a 'Helvetica' font you didn't expect, the RIP was not able to access the font used to create the job.

If you have set up a substitute table, then the replacement font will be printed instead of the one used in the document. However, the font metrics are likely to be different, causing the document to look different on the page.

Appendix A
Optimum System Configuration

This appendix explains how to set up your system to obtain the very best performance from the Océ Graphics Server L.

Hard disk subsystem

The main objective is to minimize the chances of simultaneous reading from and writing to the same hard disk in the machine. If this occurs, the heads on the disk have to move from one place to another, which takes a measurable amount of time. This in turn reduces the overall level of performance.

The intermediate solution to this problem is to connect more than one hard disk to the hard disk controller. Note that both IDE and EIDE controllers can only connect to two hard disks; SCSI controllers can connect to seven. However, the best solution is to have each hard disk driven by its own controller. The controller should have the highest bandwidth possible, to enable the greatest amount of data to be transferred in the same period of time. Bus mastering controllers are preferable since they have their own local CPU. This offloads most of the I/O processing from the main CPU, leaving it free to concentrate on running the RIP(s). In terms of the way the controller communicates with the rest of the system, Peripheral Component Interconnect (PCI) is the interface bus of choice, since it provides the highest data transfer rates. The 'Directory to use for temp. files' entry in the Memory tab of the System Setup dialog box for each instance of the Océ Server must then be configured appropriately.

Both the Windows 95 and Windows NT operating systems use a disk-based swap file as part of their normal operation. If all the physical memory (RAM) in the machine is used up, then part of its contents are saved to a file, and the free RAM now available can be used by other applications. In this way the data is 'swapped out', hence the name swap file. This swap file is often referred to as Windows' virtual memory, to distinguish it from the 'real' memory (the RAM). The operating system may read and write to this file arbitrarily; the highest performance system configuration for running multiple copies of the Océ Server will therefore have yet another controller and hard disk solely for use by the operating system.

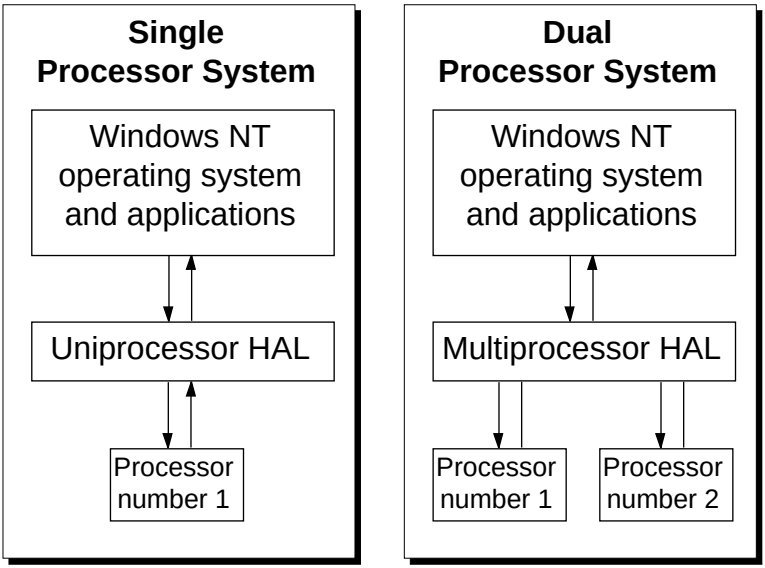
Processors/Operating system

In general, the greater the amount of processor resources that are available in the system, the higher the performance will be. Windows NT supports multiple processors.

Hardware Abstraction Layer (HAL)

Windows NT can support up to 32 processors. In practice, the maximum number possible is limited by the hardware in your machine. This ability is made possible through Windows NT's use of the hardware abstraction layer (HAL). The HAL is a layer of software that deals directly with your computer hardware and operates at a level between the hardware and the Windows NT operating system and any applications that are running.

The HAL 'hides' hardware-dependent information from the system. Applications and device drivers do not talk to the hardware directly but must deal with HAL routines to determine hardware-specific information. Therefore, the HAL acts as a filter, allowing different hardware configurations to be accessed by applications in the same manner. This is shown in the following diagram.



Threads and multitasking

A thread is one portion of a computer program which can be executed in parallel with other portions or threads. For example, one thread can perform a lengthy input/output (I/O) operation while another thread processes data. All of the threads in an application share the same virtual address space, therefore multithreaded applications can run in a system without requiring large amounts of memory. Both the Windows 95 and Windows NT operating systems support multithreading.

Windows NT is a symmetric multiprocessing (SMP) operating system. This means that all tasks are shared equally between the CPUs that are available. Compare this to the asymmetric multiprocessing (AMP) that was often used in the past. In this case, one processor would be dedicated to handling system tasks and another to input/output (I/O). When running Windows NT on a symmetric multiprocessor machine (sometimes called an “SMP machine”), it is possible to achieve a substantial speed increase on numerically intensive tasks by dividing the work among different threads; the operating system will automatically assign the different threads to different processors.

When running multiple instances of the Océ Server, each instance is a separate thread. Thus, one instance of the Server may be sending to an output device while another is interpreting a PostScript file. Even if you have a single processor machine, multiple-window applications benefit from multithreading because threads can be associated with different windows; one thread can be calculating while another is waiting for input.

Updating Windows NT from uni- to multiprocessor mode

To take advantage of the multiprocessor capabilities in Windows NT, you must install an additional processor in the computer running it. Once the processor has been installed, various settings within Windows NT need to be changed so that the operating system can take full advantage of the new processor. This is made simple with the UpToMP utility that is available from Microsoft or the supplier of your hardware.

To use the utility, you must know the drive your Windows NT installation software is on (this can be a floppy disk, CD-ROM or network drive) and the type of processor you are installing (this information should be included with the processor).

▼ **Please follow these instructions**

1. Choose **Run…** from the **Start** menu.
2. Enter **A:\UPTOMP** at the command line and click on **OK**.
3. Specify the drive that contains the installation software in the 'New HAL file path:' edit box, and choose your processor type (HAL) from the 'HAL to Install:' pull-down list box. Click on **OK**.
4. The updated system files will be copied onto the hard disk and the system will restart.
5. Windows NT will now be running in multiprocessor mode.

Physical memory (RAM)

The minimum recommended RAM to be installed in the machine is 64 MB for each instance of Océ Server to be run. The values in the Memory Settings tab within the System Settings dialog box should be set so that each instance of Océ Server has its own area of memory. The minimum and maximum physical memory limit values in this dialog box should be set to between 12 and 20MB to reduce the probability of memory swapping taking place. Refer to chapter 7, ‘Managing Memory Settings’ on page 81 for further information.

Appendix B
Running simultaneous instances

This appendix provides general guidelines for achieving optimal performance when running multiple instances of the Océ Server on the same computer.

Introduction

The Océ Server can run multiple RIP instances on the same computer. Windows NT can support multiple processors built in to the operating system. For example, if your machine has two processors, you can run a separate instance on each processor.

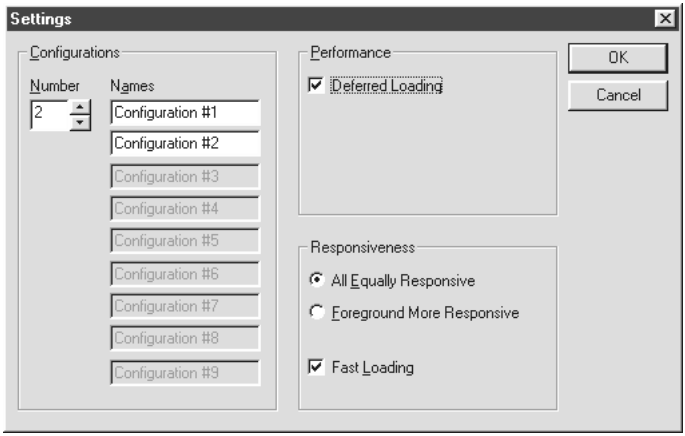
This feature has several advantages. If you are driving a relatively slow output device, then one RIP can interpret a file while another sends to the device. In this way, you can provide the device with a constant stream of jobs, thus reducing idle time.

The Multiple RIP main screen application controls the various Server instances.

Select the Multiple RIP Front End icon from the Océ Server programs group set up during installation to run the application. When the Multiple RIP main screen application runs, you can configure it via a Settings dialog box.

Click on the icon in the top left corner of the Multiple RIP main screen.

Select **Settings**… from the drop-down menu. The Settings dialog box appears:



Configurations section

Number Use the up and down arrows to increase or decrease the number of instances of the Océ Server that you want to run. The default is two. The maximum number possible is nine. However, the maximum number that can drive an output device is determined by the number of dongle(s) attached to your machine.

Names The names that are typed in the edit boxes here will appear on the tabs that are used to switch between the various instances of the Océ Server. The number of names that can be edited depends upon how many instances of the Server have been set up, i.e. the figure selected in the Number list box.

Performance section

Deferred Loading When you select this option, only the first instance is loaded at startup; other instances are loaded when you click on their tabs. When you clear this option, all instances are loaded at startup. Deferred loading is the default option.

Responsiveness section

All Equally Responsive Clicking on this radio button makes all the instances of the Océ Server equally responsive in terms of how much priority the operating system gives them. This is the default setting.

Foreground More Responsive This option gives the foreground instance of the Océ Server a slightly higher priority than all of the other instances. The foreground instance is the one actually visible on screen, and is the currently selected tab.

Fast Loading If this option is checked, the other instances of the Océ Server will load even if the foreground instance is busy. If it is unchecked, then the loading will be suspended until the foreground instance has completed its current task and has gone idle. The default is for fast loading to be enabled.

Appendix C
Colors

Working with colors

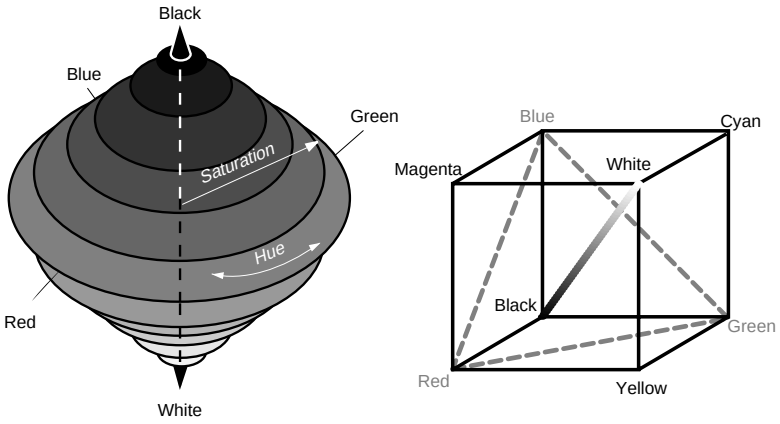
Ways of describing colors

"How green is green?" This is a very important question in digital reproduction. Our perception and interpretation of color are highly subjective. Each person sees the same color slightly differently, which makes it difficult to describe accurately a given color without a generally accepted standard.

There are several standard ways of describing color, using color models:

- RGB (red, green, blue)
- CMYK (cyan, magenta, yellow, and black)
- HLS (hue, lightness, and saturation). **Hue** is our perception of an object's color (such as red, yellow, etc.). **Lightness** is the degree of a color's luminous intensity. **Saturation** is a measure of a color's vividness or dullness.

The diagram below depicts color models in a three-dimensional representation.



Color Spaces

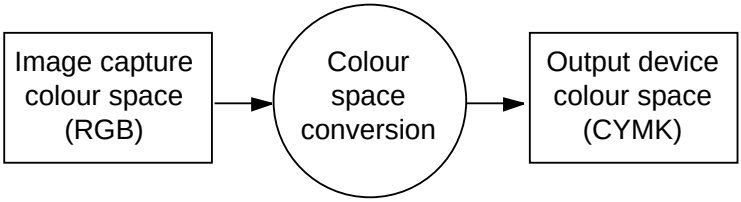
A color space is simply a three-dimensional representation of color. There are different types of color spaces, such as RGB, CIE-Lab, CIE-XYZ, and CMYK, which is a four-dimensional representation. These color spaces share one common aspect: the ability to describe a color using its coordinates in three (or four) dimensional space.

In general, most scanner and monitor (input) devices use RGB space, while most printer (output) devices use CMYK space. However, since all input or output devices have different color characteristics, RGB and CMYK color spaces are not suitable when attempting to get color consistency. For example, when you scan the same color on different scanners, you can have different RGB values; or when you display the same picture on different monitors (RGB device), you can see different colors; or when you print a color with a particular CMYK value on different printers, you can have different colors on paper.

For this reason, RGB and CMYK color spaces are called **device-dependent color spaces**, because the RGB or CMYK value and the color it refers to depend upon the particular device. There are also **device-independent color spaces,** such as CIE-Lab or CIE-XYZ. In this type of color space, one particular value of Lab or XYZ always refers to one particular color, regardless of the device.

Color Space Conversion

Purpose You use Color Space Conversion to get consistent colors across different color devices. The easiest way is to characterize each color in an independent color space, such as Lab. Thereafter, that color is expressed as a Lab value, which always refers to one unique color, regardless of the device. For instance, if you convert both input device (scanner) and output device (printer) from RGB to Lab and CMYK to Lab, respectively, you can easily match input and output colors.



In the process depicted in the figure above, the Color Space Conversion converts RGB to Lab and Lab to CMYK.

Limitations Any given device can deal with only a limited range of colors. This range, called the **color gamut**, depends on the physical characteristics of the device, rather than the type of color space. In general, different color devices have different color gamuts. For example, in a case where the color gamut of the scanner is smaller than that of the printer, certain colors printed may have been improperly scanned. Conversely, if the gamut of the printer is smaller than that of the scanner, certain colors cannot print out correctly. The conversion process takes into account the difference in color gamuts between input and output devices, and attempts to minimize the effect of colors that it cannot exactly match.

Maintaining color consistency

The Océ Graphics Server L uses color space conversions to maintain a high degree of color consistency across devices. To achieve this, the Océ Graphics Server L uses a Color Matching Module that uses ICC (International Color Consortium) profiles.

ICC profiles are 3-dimensional descriptions of hue, saturation, and brightness that characterize the color space of a color device. A profile contains all the necessary information to do a conversion between RGB and Lab (RGB profile), or between CMYK and Lab (CMYK profile).

The following is a typical process when combining an RGB profile (such as from a scanner) with a CMYK profile (such as from an inkjet printer):

1. The scanner generates colors in device-dependent RGB space.
2. The scanner profile converts from device-dependent RGB space into device-independent Lab space.
3. The printer profile converts from Lab into device-dependent CMYK space.
4. The printer prints colors in device-dependent CMYK space.

Steps **2** and **3** of this process ensure that the output colors on your print copy match as closely as possible the colors on the scanned original when using the appropriate profiles.

Choosing printer profiles

Océ provides you with printer profiles adapted to the printer for a variety of Océ inks and paper. Each combination of ink and paper has its own profile, since colors can differ depending on the type of paper and ink. For best results, use the profile designated for the particular combination of paper/ink chosen.

Océ printer profiles have names that enable you to identify the ink/paper combination for which it is designated. This string, joined by underscores, designates, in order, the **type of printer**, the **type of ink**, the **type of paper**, and a **unique number**, and ends with the extension **.cam**.

Example 5350_ga_glospap_001.cam

You use this printer profile for the Océ 5350 with Graphic Arts ink and glossy paper.

Determining input files

Using the input device profile The input device determines the proper input profiles to use. For instance, if the files for print originate from a scanner, you must use the appropriate scanner profile. If your input device did not come with profiles, contact its vendor.

Generating a profile You can also generate an input profile by using an appropriate Color Management software package. Commercially available CMS packages such as Linotype-Hell ScanOpen are suitable.

Using the sRGB profile If the input device is unknown, or an input profile is unavailable, you can use an **sRGB profile** for RGB image types. This ICC-recommended profile does not perfectly match the input device, but it can give a very good approximation.

Using the CMYK profile When your bitmap image is of CMYK type, you need a CMYK input profile (and a CMYK output profile for the 5350 printer). If the input device is unknown, you can use the Euroscale or SWOP profile as the input profile. If the input device is known, use the device's profile.

Adding new profiles

You add new profiles to the **WispPS/Cams/Profiles** folder, located in the Océ Graphics Server L installation folder. Do not put unrelated files in this folder.

Using input and output profiles

Color matching corrections involve two profiles: an **input profile** describing the color characteristics of the input device, and an **output profile** describing the color characteristics of the output device. These two profiles are combined in a profile configuration.

To get expected results, you must apply the appropriate type of profile to the particular color space, such as an RGB profile for an RGB input image type.

Color matching corrections should generally be done on the Océ Graphics Server L. However, you must turn off this option if another application has already performed the color corrections.

Using rendering intents

ICC has defined four reproduction methods, called **rendering intents**, that you can use for your specific needs.

- **Perceptual** Each color may change slightly depending on the color gamut, but in such a way that its relative position remains the same. This is a typical method used for scanned photographs.
- **Absolute Colorimetric** Colors within the color gamut remain the same. Colors beyond this limit change to colors that are on the edge of the color gamut. The lightness remains the same, while saturation changes.
- **Saturation** Colors become more saturated and contrast can decrease. This is a typical method used for computer-generated images and business graphics.
- **Relative Colorimetric** This method is similar to absolute colorimetric intent. The difference is in the matching of white points; color matching is then performed relative to these white points.

Simulating another printer

The Server L can also simulate another printer on your Océ 5350. This process involves three profiles: an input profile, an output profile for the simulated printer, and a proxy file for the simulating printer.

To simulate the colors of an offset printer on your Océ 5350, there are two standard offset presses provided: SWOP (US standard), and EUROSCALE (European standard).

Printing existing files

Bear in mind that each application produces PostScript files in a slightly different way. Many of these differences result from the application 'fine tuning' the PostScript file for a particular printer or interpreter. When printed on the Océ Server, these differences may cause the final printed page to look different from the page composed within your application. Certain printer-specific instructions within the PostScript file may also result in the Server generating a warning or error message.

The cause of such problems can most often be traced to the application using the following types of commands:

Commands dealing with font information: The PostScript file may not contain some of the fonts it uses, because the creating application considers these fonts to be resident in the target printer. If this is the case, and the font is not available to the Océ Server, the RIP will generate a warning and use one of its 'built-in' fonts (Helvetica) instead.

Commands dealing with paper sizes: The PostScript file may be formatted for a certain paper size available to a certain printer. The generating application may also have taken into account the non-printable area of the paper to format the page. If the requested paper size is not currently available to the Océ Server, it may abort the job with a PostScript configuration error, or try and adjust the print job to fit on one of the available papers.

Commands dealing with or using printer resolution: The PostScript file may contain objects built by the application using a specific printer's resolution (dots per inch). Most often, these are objects which contain bitmaps, patterns or crosshatches. If the current printer selected within the Océ Server has a significantly different resolution from the printer for which the PostScript was created, such objects may appear corrupted.

Commands using printer-specific color spaces: The PostScript file may specify object colors in a particular printer's native color space. For example, the colors may be specified in devicegray or devicergb color spaces. The Océ Server will convert these colors to its current printer's color space using standard PostScript Level 2 procedures.

Commands dealing with VM (virtual memory): Each PostScript interpreter has a certain amount of VM (virtual memory) associated with it. If a given

application creates PostScript files using more VM than Océ Server has available, a PostScript VMerror will result.

Note: *PostScript VMerrors are nearly always due to a lack of available disk space on the Océ Server (for example, not enough space to store scans).*

Often, many PostScript generation options can be selected from within the application. In general, you need to select options that would include the maximum amount of information within the PostScript files. For example, page size and fonts should be included in the PostScript file. The paper size selected should closely match the paper for which the document was created. Also, the creating application should be configured as closely as possible to the printer you will be printing on. If any Level 2 features are available, enable them. If resolution options are available, set them up to match as closely as possible the resolution of the final page.

Color banding and printing in full 24-bit color

Some applications were not designed to print in full 24-bit color at high resolution and, as a result, banding may result in what should print as smooth gradients when standard screening is used.

The way to get around this problem is to set the halftone screen frequency (lines per inch or lpi) in the device driver to a low value (for example, 15 lpi instead of 60 lpi), and let the Océ Server manage the graduation. In general, the higher this value is set, the lower the number of graduations the application will allow to be printed.

Appendix D
Customizing the button bar

Server button bar

The Button Bar is the strip of buttons along the top of the Océ Server main screen. This appendix describes how you can customize the bar to best suit your own particular requirements.

When you first install the Océ Server, a default set of buttons is set up for the button bar.

Whenever a button is used, a specified set of commands is executed. These commands are in the Server Macro Language format. You can change the appearance of the button bar and change the commands executed by using these buttons.

For example, you can add up to 16 buttons to the button bar, display them with text and icons or as icons only, and you may execute any command available through the Server Macro Language. A list of available functions is given in ‘Macro language command index’ on page 128.

Button bar settings are changed through the Button Bar tab within the System Settings dialog box.

Changing button bar icons

Click on the Settings icon and select **Properties...** from the drop-down menu. The System Settings dialog box will open. Select the **Button Bar** tab.

Controls available in this tab enable:

Button Title The title for the currently selected button is displayed in this edit box. You can edit this title or enter a new one. The title will be displayed on the button if you select the **Show Text+Icons** option. The Button Title is also used to identify buttons in the Select Button list box.

The existing icon for the currently selected button is displayed on the right side of the Button Title: edit box.

Change Icon Clicking on this button opens the Select an Icon dialog box, where you can select icons for buttons in the Button Bar from any program or library file which can run under Windows.

A vertical list box displays all icons available from a given program (*.EXE) or library (*.DLL) file. Click on an icon to select it. Your choice will be highlighted by a button-like selection box. Then click on **OK** to confirm your selection, or **Cancel** to revert to the button's original icon. The chosen icon is

displayed on the right side of the Button title: edit box as the icon for the currently selected button.

The Océ Server is shipped with a library of icons contained in a file called WSPICONS.DLL. By default, the Select an Icon dialog box will display icons from this library. However, you may choose any Windows executable program file (file extension *.EXE) or library file (file extension *.DLL) that contains icons by typing in the filename in the **File to look for icons in** edit box. A convenient way of selecting files is by clicking on the **Browse...** button, then selecting the file through the File Open dialog box that pops up. Once you have selected a new file, press the **Tab** key to load icons from the new file.

Edit Macro This edit control lets you enter or edit the Océ Server Macro Language commands that will be executed when the button is activated.

Select Button This list box displays all the button titles of all buttons in the Button Bar you are editing. Select the button you want to edit by clicking on its title in this list box. The selected button title will be highlighted. The entry in the Button Title: edit box will change to the selected button, and the macro to run for this button will be loaded into the Edit Macro dialog box. You can then edit the title in the Button Title: edit box, the macro via the Edit Macro button and select a different icon using the **Change Icon** button.

Note that when you select a different button from this list box, any changes you may have made to the last selected button are automatically saved.

The order in which button titles appear in this list box is the order in which they will appear in the button bar. You may use the **Up** or **Down** buttons in the Select Button section of the Button Bar tab to change this order.

Up This button moves the button highlighted in the Select Button list box up one place in the list.

Down This button moves the button highlighted in the Select Button list box down one place in the list.

Add New This adds a new button to the button bar. The button will be given the default Button Title of 'New Button' and a default icon. You should then edit the title in the Button Title: edit box, enter a macro via the Edit Macro button and select a different icon using the Change Icon button.

Delete This deletes the button currently selected (highlighted) in the Select Button list box.

Separator This button puts a space between two buttons when they are displayed on the button bar. Using this button will create a Separator at the bottom of the list. Use the Up and Down buttons to move the separator between two buttons.

Revert to default buttons This button discards all changes you may have made to the Button Bar and installs the default Océ Server buttons.

Setting button bar display options

Show Text+Icons, Show Icons Only These radio buttons determine the way buttons in the Button Bar will be displayed. With **Show Text+Icons** selected, each button will show an icon on top, and a button title below it. With **Show Icons Only** selected, each button will show just the icon.

Make all buttons the same size By default, the size of each button is adjusted to fit around the title text for that button. If you check this check box, the Océ Server will adjust all buttons to have the same width (the width of the button with the widest text).

Show Tool Tips When this option is checked, positioning the cursor over an Océ Server default button within the Server main screen will display a brief message, indicating the purpose of the button.

Hide menu bar The Océ Server Menu Bar, consisting of 'Spooler', 'View' and 'Help', is displayed by default across the top of the Server main screen. Check the Hide menu bar option if you do not wish the Menu Bar to appear.

Appendix E
Command Reference

This section addresses the needs of advanced users with good programming knowledge who wish to customize specific functions.

Macro language command index

The following is a list of all the Océ Server Macro Language functions. In each description, the format for the function call is shown with required and optional parameters. Optional parameters are enclosed in square brackets [], with a colon followed by the default value for that parameter (if any).

For example: **Print(FileName [, Type:0])** implies that the function 'Print' takes one required parameter called 'FileName', and one optional parameter called 'Type', the value of which will be taken as 0 if 'Type' was not specified.

Abort() This function aborts the printing of any file. Same as selecting 'Abort' from the button bar.

Returns: Nothing.

About()
AddFiletoSpoolQueue()
ColourAdjustmentOptions()
Contents()
DeleteFilefromSpoolQueue()
Exit()
ExitSpooler()
FilePreviewOptions()
Index()
InteractiveMode()
MakeSelectedFilesActive()
MakeSelectedFilesInactive()
MemoryAndSystemOptions()
MoveSelectedFilestoBottom()
MoveSelectedFilestoTop()
OpenAndPrintEPSFile()
OpenAndPrintFile()
PreviewEPSFile()
PreviewFile()
PrinterOptions()
SpoolerHelpContents()
SpoolerOptions()
StartSpooler()
StopSpooler()
ViewErrors()
ViewTranscriptWindow()

These functions all have exactly the same effect as selecting the command of the same name from the Océ Server main window menus. For commands that bring up a dialog box that prompts for user input, use the WaitDialog() function to determine when the dialog box has been dismissed by the user. For example:

About(); WaitDialog(); Show("About box was shown");

brings up the 'About' dialog box, waits for the user to press **OK**, and then displays the message "About box was shown".
Returns: All these functions return nothing.

AddMenu(Menu_Title, Item_Title, Macro)

This function adds a new menu command to the main window drop-down menu with the name *Menu_Title*. The new command will have the title (displayed in the menu) of the text passed in for the *Item_Title* parameter. The macro functions passed in for the Macro parameter will be executed when the user selects the new item. Remember to enclose the *Macro* parameter within braces { and }.

If a drop-down menu with name '*Menu_Title*' is already present, the new command will be added to that menu. If '*Menu_Title*' does not exist, a new drop-down menu with this name will be created. If the command '*Item_Title*' is already present in '*Menu_Title*', the '*Macro*' parameter specified will replace any existing macros.

Any underlined characters in the '*Menu_Title*' or '*Item_Title*' parameters must be preceded by an '&' character. For example, to add an item "Test Item" to the "Files" menu that displays the message "Hello World!", execute the following function:

AddMenu("&Files","&Test Item",{Show("Hello World!")})

Returns: Nothing.

DeleteMenu([Menu_Title [,Item_Title]])

Deletes a command item from the Océ Server main window menu. This function takes two optional parameters. If no parameters are passed, the entire main window menu bar will be removed. If just the '*Menu_Title*' parameter is specified, that entire drop-down menu will be removed. If *Item_Title* is also specified, only that command will be removed from the drop-down menu.

Any underlined characters in the '*Menu_Title*' or '*Item_Title*' parameters must be followed by an '&' character. For example:

DeleteMenu()Deletes the main menu bar.

DeleteMenu("&View") Deletes the View menu.

DeleteMenu("&View","&View Errors") Deletes the View Errors entry from the View menu.

Use RestoreMenu() to get back to the default menu configuration.

Returns: 1 if something was deleted, else 0.

Dup()

Duplicates the top object on the macro interpreter's parameter stack. This is useful, for example, when you pass a first parameter to If or IfElse, but want to pass the same parameter to a function passed as a parameter to the If or IfElse. For example, suppose you want to input a file name using the GetFileName function, and you want to print that file only if **OK** was pressed (GetFileName returned non-0), else not. You could do the following:

if (Dup(GetFileName()), { Print(Dup(),1) })

The first Dup() duplicates the name returned by GetFileName(), which is embedded into the If function. The second Dup() duplicates the copy of the file name, and passes it as the first parameter to Print.

Returns: A copy of the top object on the parameter stack (or the parameter passed in to Dup()).

FirstRun()

Tests whether this is the first time the Océ Server has been run since installation.

Returns: 1 if first run since install, else 0.

GetColourDepth()

Returns the bits per pixel per color plane for the current printer. A halftoning printer can print up to 8 bits (256 colors), and a continuous tone printer can print up to 24 bits (3 bytes, or 1.6 million colors).

Returns: 1 if halftoning printer, 8 if continuous tone printer.

GetColourSpace()

Returns the number of color planes supported by the current printer.

Returns: 1 if monochrome printer, 3 if RGB printer, 4 if CMYK printer.

GetFileName ([Prompt:"Open File" [, FileFilter:*.* [,InitialDirectory:Windows Directory]]])

Displays a File Open dialog box and allows the user to select a file. The dialog box can be configured by passing optional parameters. The *Prompt* parameter is used to replace the title of the "File Open" dialog box.

The FileFilter parameter changes the files searched for and displayed in the dialog box.
The format is “File Description|Filter|File Description 2|Filter2 …”. For example:

“PostScript Files|*.PS|All Files|*.*”

searches for files with the extension *.PS when the user selects “PostScript Files” from a list box, and searches for *.* when the user selects “All Files”.

InitialDirectory sets the directory to do the search in. Defaults to the directory in which Windows was installed.

Returns: The complete file name plus path that the user selected if **OK** was pressed, else 0 if **Cancel** was pressed.

GetPrinterName()

Returns the name of the current printer as shown in the Properties box when you click on the Spool Queue icon below the button bar.

GetSelectedFile ([QueueNumber])

Returns the complete path of the first file selected from one of the spooler queues. If the *QueueNumber* parameter is not passed, both the active and inactive queues are searched (in that order) for a selected file. If *QueueNumber* is 1, only the inactive queue is searched. If it is 0, only the active queue is searched.

Returns: 0 if no files selected, else the complete path & filename of selected file.

If(TestParam, MacroToExec)

Determines whether or not to execute a macro. **The macro executes if TestParam is not 0**; else it does not execute if TestParam is 0. The second argument must be a valid set of functions, enclosed within { and } braces.

IfNot(TestParam, MacroToExec)

Determines whether or not to execute a macro. **The macro executes if TestParam is 0**; else it does not execute. The second argument must be a valid set of functions, enclosed within { and } braces.

Returns: Nothing.

IfElse(TestParam, MacroIfNotZero, MacroIfZero)

Conditionally executes one of the macros passed in as the MacroIfZero and MacroIfNotZero parameters. The MacroIfNotZero is executed if TestParam is not “0”, else MacroIfZero is executed. The second and third parameters must each be a valid set of functions, enclosed within { and } braces.

Returns: Nothing.

Input([Prompt])

Displays an input dialog box prompting you to enter some text. When you enter a prompt, it shows up the prompt text. You must enclose the prompt parameter within double quotes.

Returns: 0 if the user pressed **Cancel**, else the text entered by the user.

IsEqual(param1, param2)

Checks for equality of the passed parameters. Two parameters are considered to be equal if ALL characters within both parameters are the same, and in the same order. For example “Hello” and “Hello ” are NOT the same as the second parameter contains an additional space.

Returns: 1 if both parameters are the same, else 0.

OkCancel([Text1 [,Text2 [,Text3 [...]]]])

Displays all parameters passed to it in a message box with two buttons, **OK** and **Cancel**. If no parameters are passed, displays whatever was on the top of the macro interpreter’s parameter stack.

Returns: 1 if **OK** was pressed, else 0.

Pop()

Discard the top object on the macro interpreter’s parameter stack.

Returns: Nothing.

Preview(File [[[1:0],ContextID:0],Copies:0])

Previews the file passed in as the File parameter. Pass in the second parameter as 1 to process an EPS file, o 0 (default) as a PS job. ContextID identifies the printer queue to preview for.

Copies forces the copy count, use 0 (default) to print number of copies requested by the PS file.

Returns: Nothing.

Print(FileName,[[[1:0],ContextID:0],Copies:0])

Prints the file passed in as the File parameter. Pass in the second parameter as 1 to process an EPS file, or 0 (default) as a PS job. ContextID identifies the printer queue to print to.
Copies forces the copy count, use 0 (default) to print number of copies requested by the PS file.

Returns: Nothing.

ResizeWindow(Left [,Top [,Width [,Height]]])

Changes the size of the Océ Server window, or moves it. Left specifies the top left X coordinate (in screen pixels), or distance from the left edge of the screen to the left edge of the Server window. Top specifies the distance from the top of the screen to the top of the window. Width and Height are the width and heights of the window in pixels.
Any window size parameter that is not passed in remains unchanged from the current setting.

Returns: Nothing.

RestoreMenu()

Restores the main window menu to the default values. This is useful for undoing the effects of an AddMenu() or DeleteMenu() function.

Returns: Nothing.

Run(FileToRun)

Runs an external program. The program file name (including the path, if any, for the .EXE file) plus any command line parameters for the program to be run are passed in the FileToRun parameter.

Returns: 1 if program started successfully, else 0.

Show([Text1 [,Text2 [,Text3 [...]]]])

Displays all parameters passed to it in a message box. The parameters are shown on separate lines. If no parameters are passed, displays whatever was on the top of the macro interpreter's parameter stack.

Returns: Nothing.

StrCat(p1, p2[,p3[,p4...]])

Concatenates the two (or more) parameters p1 and p2 and returns the concatenated value. For example:

StrCat(Hello, " There") returns "Hello There".

Returns: The two parameters passed in, combined into a single text.

TraceErrors(OnOff)

Turns macro debugging messages on or off. If OnOff parameter is 1, debugging messages are turned on; if 0, they are turned off. The normal state when a macro starts executing is: debugging messages off.

When debugging is on, the macro interpreter will put up a message box which will display any errors that occur during macro interpretation. Errors tend to 'cascade'; one error may set off another, so usually only the first error that occurred is significant. The message shown may display position information, such as "error occurred at 21". This is the character position within the macro at which the interpreter was when the error occurred. This may or may not be the actual position of the error. The errors reported by the macro interpreter are:

- **INVALIDPARAM:** The parameter passed to a function was not of the form expected by the function.
- **INVALIDPARAMCOUNT:** The wrong number of parameters was passed to a function.
- **CANNOTEXECCMD:** The command specified could not be executed for some reason.
- **NOSUCHFUNCTION:** The function name specified in a macro does not specify a valid function.
- **FUNCSTACKOVERFLOW:** Too many functions were called in a nested fashion (one within the other).
- **PARAMSTACKOVERFLOW:** The total number of parameters being passed to all functions within a macro exceeds the macro interpreter's limit.
- **FUNCSTACKUNDERFLOW:** The macro interpreter expected to find a function to execute, but failed.
- **PARAMSTACKUNDERFLOW:** Too few parameters were passed to a function.

■ **OUTOFMEM:** Not enough memory left to execute macro.
■ **SYNTAX:** A syntax error (unrecognized macro format) occurred.
Returns: Nothing.

Waits for a dialog box put up by one of the main window menu functions to terminate. Normally, these functions display the dialog box, then return, and the macro containing them keeps running. The WaitDialog function provides a way to wait until the user presses **OK** or **Cancel**, then continues running the rest of the macro.

Returns: 1 if **OK** was pressed by user, else 0.

YesNo([Text1 [,Text2 [,Text3 [...]]]])

Displays all parameters passed to it in a message box with two buttons, **Yes** and **No**. If no parameters are passed, displays whatever was on the top of the macro interpreter's parameter stack.

Returns: 1 if **Yes** was pressed, else 0.

Buttons(Title,Info,Button1 [Button2 [,..]])

Displays a list of buttons titles [Button1], [Button2] etc., and returns the button selected by the user. Title is displayed as the button dialog box's window title, and Info is displayed above the buttons to prompt the user.

Returns: 0 on cancel, 1, 2, 3, etc. if button selected.

CheckFile(filename[,Verbose:1])

Checks if filename file exists. If verbose is 1, message is displayed in any OpenWindow window showing file check progress.

Returns: 1 if file exists, else 0.

CloseWindow()

Closes any window opened using the *OpenWindow* function.

Returns: Nothing.

CopyFile("sourcefile", "destinationfile")

Copies file sourcefile to file destinationfile.

Returns: 0 on success, 1 if out of memory, 2 if could not open source, 3 if could not open destination, 4 if source file is 0 bytes in size, 5 if file read error, 6 if file write error.

EnableLog(Enable)

This function works only within scripts called through the “Execute Script Before Job” field from the Advanced tab of the Printer Setup dialog box. It has the effect of turning on (Enable=1) or off (Enable=0) the logging of information during the execution of the script. By default, the Océ Server will log job information such as start and end time, etc. However, by calling this function with Enable set to 0, logging of information is disabled.

Exec(FileName)

Executes FileName as a macro language script file. Execution returns to the calling macro or script when execution within FileName is finished. Execution may be terminated prematurely within FileName by calling the Return() function.

GetMemory()

Returns the amount of total memory available to the operating system and the amount of free memory. These numbers are in bytes, and refer to physical rather than virtual memory within the system.

Returns: A single string comprising two numbers, e.g. “16000 8000”, representing the total and unused physical memory.

GetPapers([ContextNo:0])

Returns the first available paper source for device (0 is the first position on the paper lift).

GetParams([ContextNo:0],ParamNo)

Returns: The device driver environment parameter identified by *ParamNo* (valid values from 0 to 7 inclusive) within the printer context identified by *ContextNo*. These parameters are used to store printer-specific settings, and their meaning is therefore printer device driver-specific.

GetProfile(ApplicationName, KeyName, DefString, FileName)

Reads a value within a .INI file. The [ApplicationName] section within the file FileName (which should have the extension .INI) is looked up for a

KeyName=Value line, and the Value part is returned. If this is not found, DefString is returned instead.

Returns: Value read or DefString

GetSelectedContext([ActiveOrInactive:-1])

Returns: The printer context of the first file found in the spooler queues. Only the active queue is searched if ActiveOrInactive is 0, only the inactive queue is searched if it is 1, and both are searched if it is -1. A printer context is a number that uniquely identifies each of the printer instances for which the Océ Server maintains independent settings. 0 identifies the default printer context.

GetSelectedCopies([ActiveOrInactive:-1])

Returns: Path and filename of first active selected file (if ActiveOrInactive is 0, then from active list, if 1 then from inactive list, if -1, then from either, searching active first). If none found, returns 0.

GetSpooledContext()

This function can only be used within scripts called through the Execute Script Before field in the Advanced Options dialog box. It returns the identifier of the Printer Context that is active during the execution of the script.

GetSpooledCopies()

This function can only be used within scripts called through the Execute Script Before field in the Advanced Options dialog box. It returns the number of copies that were requested for the job whose execution resulted in the script file being called.

GetSpooledFile()

This function can only be used within scripts called through the Execute Script Before field in the Advanced Options dialog box. It returns the name of the job whose execution resulted in the script file being called.

GetSpooledFileStatus()

This function can only be used within scripts called through the Execute Script After field in the Advanced Options dialog box. It returns the status of the job that was executed before the script was called.

Returns: 0 on no error, -1 on PostScript execution error, -2 on user abort.

GetWindowText()

Returns: The title text of window currently having focus, else 0 if error or no such window.

Inc(Param)

Increments by 1 the parameter Param, and returns it. The string Param is searched for the first numeric substring, and this is incremented. If no numeric substring is found, then a 0 is appended, e.g.,

inc(0) returns 1

inc(hello) returns hello0

inc(hello0) returns hello1

inc(10hello) returns 11hello

IsButtonChecked([ChildTitle[,ParentTitle]])

Returns the status of the check box titled ChildTitle within the parent window entitled ParentTitle. If either of these is not specified, the window or check box currently having the focus is used instead.

Returns: 1 if checked, 0 if not, -1 if failure.

Local([l1,[l2,[l3...]]])

Declares local variables l1, l2, l3 etc. within a funcdef. Local variables have separate values to same named variables outside the funcdef or within other funcdef. Within recursive calls, each recursively called instance of the funcdef also keeps separate values for its local variables.

Not(Value)

Returns: 0 if value is non-zero, else 1.

OpenWindow([Title:Output[,x:0 [,y:0 [,width:320 [,height:240 [,state:0]]]]]])

Opens a generic window that can be used for output during script execution by functions such as printf. The window can optionally be given a title via Title, and positioned anywhere on the screen via x, y, width and height. These specify, in pixels, the top left corner of the window, and its width and height. If State is set to 1, x, y, width and height are ignored, and the window is

maximized. Note that OpenWindow() will only succeed if a window is not already opened.

Returns: 0 on success, 1 on failure.

Password([Prompt])

Pops up a text entry dialog box, displays prompt above it then waits for user input. The user's input is shown as "*" characters, password style.

Returns: Input string if **OK** pressed, else 0.

PostPrintStopSpooler(Stop)

This function can only be used within scripts called through the Execute Script After field in the Advanced Options dialog box. If Stop is 1, the spooler will stop spooling any more jobs.

Printf(format,[param1 [,param2 ..]])

Implements the print task statement in C programming language. Format is a format specifier string that may contain constant strings interspersed with special escape characters that insert special characters such as new line, or specify insertion of param1, param2 as strings. The following escape characters are supported:

%s : insert one of param1, param2, etc., depending on position.

\n: Insert new line

Output is sent to any window opened via the *OpenWindow()* function. For example:

s1="carrots";

s2="turnips";

printf("%s are vegetables\nas are %s.",s1,s2);

results in the following output:

carrots are vegetables

as are turnips.

Returns: Nothing.

Quit()

Terminates The Océ Server application.

Reboot()

Reboots the computer as if from a warm reset. The operating system is started again.

Repeat(MacroString,Times)

Executes the macro in MacroString a number of times specified by Times. The repeat macro is exited prematurely if the Return() function is called within MacroString.

Restart()

Restarts Windows. This function only works if all programs currently running within Windows can be closed down by Windows.

Return([retval])

Returns immediately from a funcdef, a macro executing within a while() function loop, a repeat() function loop, or a macro file executed via the Exec() function. Within a funcdef, a parameter passed to Return() is pushed onto the stack. This can be used to return values from funcdefs.

SetExternErrorMessage(Msg)

This function can only be used within scripts called through the Execute Script Before field in the Advanced Options dialog box. The string passed in as Msg is logged to the Océ Server log file. Use this function to log errors which occur during script execution.

SetExternPrintCount(Count)

This function can only be used within scripts called through the Execute Script Before field in the Advanced Options dialog box. It sets the count of prints done by the script that was executed (if any). Use this function to inform the Océ Server of the total count of prints done by the script file.

SetExternRetCode(RetCode)

This function can only be used within scripts called through the Execute Script Before field in the Advanced Options dialog box. Scripts use this function to tell the Océ Server what to do once script execution has terminated. By default, the Server will skip the job file whose execution caused the script to be called. By setting different values through this function, however, it is possible to change this behavior. The possible values for RetVal, and the corresponding behavior, are:

0 :Execute the job file through the interpreter as if it were a PostScript file.

1 :Skip the job file (default). This means that the job file is treated like a normal PostScript job would be after being successfully interpreted through the spooler.

2 :Treat the job file as if an error had occurred during execution. The job will be returned to the inactive queue, with an error marked against it.

WaitSeconds(Seconds,[Yield:0])

Suspends script execution for Seconds seconds. If the Yield parameter is non-zero, other applications are allowed to execute, while waiting.

While(ConditionMacr,ExecuteMacr)

Repeatedly executes ConditionMacr. For each execution, if the result of the execution is non-zero, the ExecuteMacr macro is executed. When the result is 0, the While() function terminates. Execution can also be terminated by ExecuteMacro calling the return() function. Examples of while functions:

```
while( {1}, {

Show(“This will execute forever”);

});

while( { isequal(Buttons(“Choose”,Press a button”,

“Press me to finish”,

“Press me to continue”),1)},

{
```

Show(“Still executing”);

});

WriteProfile(ApplicationName, KeyName, String, “FileName”)

Writes an entry into an .INI file. The entry, of the type KeyName=String, is written to the [ApplicationName] section of the .INI file FileName. Use this to save settings for later use. The String parameter can subsequently be read through the GetProfile() function. If a KeyName= key already exists within the [ApplicationName] section, its value is replaced by the String parameter. If String has the value NULL, the KeyName= value pair is removed. If KeyName has the value NULL, the entire [ApplicationName] section is removed.

FindFile([wildcards[,attribs]])

If wildcards are specified, first file in new search is returned, else next file.

Returns: Valid filename or 0 if there are no more files.

Search is done with flags _A_NORMAL unless other flags are specified in attribs.

MakeDirectory(filename)

Returns: 0 if no error, 1 if error occurs.

DeleteDirectory(filename)

Returns: 0 if no error, 1 if error occurs.

AttribToStr(atr);

Converts attributes returned by atr to a string form.

Attrib(filename,[setattrib])

Returns attributes of files if no setattrib specified, else nothing and sets attributes. If attributes returned, they are in the form of a number that can be converted to a string form via the AttribToStr function.

Attribute characters are AHNRDSV for

ARCHIVE

HIDDEN

NORMAL

READONLY

DIRECTORY

SYSTEM

TEMPORARY

Open(filename [,mode])

Mode is combination of the following chars: “CDXPRWV”.

Returns: Handle or -1 on error.

Close(handle)

Closes a file handle opened by Open.

Write(handle,string);

Writes string to file handle opened by Open.

Returns: Count of bytes written.

Read(handle,count);

Returns read string from file *handle* opened by Open.

Seek(handle,count[,origin]);

Moves to a position in a file. “Handle” is the file name; “count” is the number of bytes; “origin” is the starting point.

Beep([Value:0]);

Creates a beep sound. Value may change the sound, depending on your system setup.

Returns: Nothing.

ChangeWorkingSet(Min,Max);

Fine tunes the application’s physical memory usage, by telling the OS to use between Min. and Max. KB of RAM for the application.

FPrintf(freset,file,format,[param1 [,param2 ..]]);

C programming language style fprintf. Writes a string to the file specified by the filename file. If freset is 1, and the file exists, the previous contents are discarded before string is written, else the string is appended to the file. Format gives the string to write, with '\n','\r' or '\t' for line feed, carriage return and tab characters. Any %s strings within format are replaced by param1, param2, etc.

GetInstanceNo()

Returns the instance number of the RIP. If 2 RIPs are running, this function will return 0 in the first RIP, 1 in the second RIP.

GetSystemDir()

Returns the windows system directory, e.g. C:\WINNT\SYSTEM32.

GetWindowDir()

Returns the windows directory, e.g. C:\WINNT.

GetAppDir()

Returns the directory from which this application was started, e.g. C:\WISPPS\BIN32.

ShowBuildInfo()

Displays a dialog box containing build information about this application.

Returns: Nothing.

Value(In)

Returns *In.* This is useful for setting the value of variables:

MyVar=Value("Hello"); // MyVar is set to Hello.

Var2=Value(MyVar); // Var2 is set to Hello.

Command line parameters

Océ Server

The following command line parameters are available for the Océ Server:

-d1 Keep a debugging log. Log severe error messages only.

-d2 Keep a debugging log. Log severe error and warning messages.

-d3 Keep a debugging log. Log severe error, warning, and information messages.

Note: *The Océ Server will put the above messages in a file called DEBUG.LOG in the Windows directory on your system.*

-sKeep a startup log. A log of internal function calls is sent to the file called STARTUP.LOG in the Windows directory on your system.

-tForce Title Bar ON (even if this has previously been turned off via Wispps.ini).

-nNo banner on start up.

-oStart spooler after the Océ Server startup.

-1Start '2nd' instance of the Océ Server

-2Start '3rd' instance of the Océ Server

-3Start '4th' instance of the Océ Server

-4Start '5th' instance of the Océ Server

-5Start '6th' instance of the Océ Server

-6Start '7th' instance of the Océ Server

-7Start '8th' instance of the Océ Server

-8Start '9th' instance of the Océ Server

-9Start '10th' instance of the Océ Server

-cClient mode (used by SWOP.EXE).

-hHide window on startup.

-XPass additional parameters to printer driver.

Printer driver command line parameters:

-dKeep a debugging log in the file called DRIVER.LOG in the Océ Server Bin(x) directory.

-vVerbose mode

Note: *Use the following switches to start up the Océ Server for troubleshooting in relation to Océ Server or printer driver problems:*

wispps5.exe -s -d3 -X -d -v

Using these switches will cause Wisp-PS to keep STARTUP.LOG, DEBUG.LOG and, when you carry out any printing, DRIVER.LOG. You can send these *.LOG files to your Océ representative to help determine the cause of problems.

Océ Server Remote RIP Server

The following command line parameters are available for the Océ Server RIP Server:

-mMinimize on startup.

-pUse unique password file (default share instance 0 password file).

-iX Start instance X where X = 0,1,2.. (normal mode, NOT Slave).

-qEnable the 'Change Scanned Image Location' option.

-s[X,Y]Start Master version of Remote RIP Server and Slaves.

For example, starts instance 0 as Master and instances X, Y as Slaves. (Slaves will attach themselves to the Master instance.)

-tX Start Slave instance of Server. The Master instance must have been started already (X = instance).

Note: *You cannot have a master instance of the Remote RIP Server running and a normal instance 0 also running.*

If you have a Slave instance X running, you cannot have a normal instance X also running.

To use the Master/Slave mode you must start the Remote RIP Server using the -s command line parameter.

Appendix F
Océ Poster Layout

This chapter explains how to install and use the Océ Poster Layout application.

Introduction

The Océ Poster Layout is a page layout tool designed for use with Océ Graphics Server L.

Océ Poster Layout enables you to import a number of files in a wide range of file formats into the application and lay out the objects contained in the files on a single page. The page can then be printed in its entirety to an Océ Graphics Server L spool queue for ripping and output. Alternatively, you can divide the page into a number of tiles, print each tile via a Océ Graphics Server L spool queue and assemble them later by hand. This means you can output very large pages, for example a design to cover a 20-foot wall, or an exhibition stand.

Océ Poster Layout

The Océ Poster Layout is included on your Océ Graphics Server L CD-ROM and is automatically installed on your computer at the same time as the Océ Graphics Server L application.

Using Océ Poster Layout

The Océ Poster Layout online Help file contains an explanation of the menu options and dialog boxes and instructions on how to use the Océ Poster Layout application. You can open this Help file once your application has been successfully installed.

▼ **To open the Help file**

1. Choose Start, then Programs, then the Océ Graphics Server L program folder.
2. From the Océ Graphics Server L program folder, choose the Océ Poster Layout Help icon.

or from within the Océ Poster Layout application

- From the Help menu, choose **Contents** to open the Windows Help utility and display the Océ Poster Layout Help Contents page.
- From the Help menu, choose **Search for Help on** to open the Windows Help utility and display the Search dialog box. Choose the topic required from the list.
- From the Help menu, choose **How To Use Help**; this provides information on how to use the Windows Help utility.

Appendix G
Miscellaneous

How to read this manual

The consistent style that is used in this manual enables you to quickly become familiar with the use of this manual and ultimately the Océ Graphics Server L.

Description Each section or subsection contains a description of the feature or operation identified in the title. It might also include possible applications, as well as any guidelines that you should bear in mind.

Procedures A description is followed by a procedure. A procedure always begins with a phrase which briefly describes the procedure, followed by a series of numbered steps that take you, step by step, through all phases of performing the operation.

Figures and tables Figures and tables are titled and numbered sequentially throughout this manual. Figures include pictures of product components, screen dumps, examples, and diagrams of concepts discussed in the description.

Attention getters There are several types of information to which we draw your attention. This information is classified as follows:

Note: *In a 'Note', information is given about matters which ensure the proper functioning of the machine or application, but useful advice concerning its operation may also be given.*

Attention: *The information that follows 'Attention' is given to avoid damage to your copy or original, the copier or printer, data files, etc.*

Caution: *The information that follows 'Caution' is given to prevent you suffering personal injury. .*

User survey

Did you find this manual to be accurate?

- ❑ Yes
- ❑ No

Were you able to operate the product after reading this manual?

- ❑ Yes
- ❑ No

Does this manual provide adequate background information?

- ❑ Yes
- ❑ No

Is the format of this manual convenient in size, easy to read and layed out well?

- ❑ Yes
- ❑ No

Did you find the information you were looking for?

- ❑ Always
- ❑ Most of the times
- ❑ Sometimes
- ❑ Not at all

How did you find the information you were looking for?

- ❑ Table of contents
- ❑ Index
- ❑ Neither

Are you satisfied with this manual?

- ❑ Yes
- ❑ No

Thank you for evaluating this manual.
If you have any other comments or concerns, please explain them on the following page.

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Comments:

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Océ-Technologies B.V.
Attn: ITC-User Documentation
P.O. Box 101
5900 MA Venlo
The Netherlands

Addresses of local Océ organizations

Océ-Australia Ltd.
P.O.Box 363
Ferntree Gully MDC VIC 3165
Australia

Océ-Österreich GmbH
Postfach 95
1233 Vienna
Austria

Océ-Belgium N.V./S.A.
Avenue J.Bordetlaan 32
1140 Brussels
Belgium

Océ-Brasil Comércio e Industria Ltda.
Caixa Postal 3187
01060-970 Sao Paulo, SP
Brazil

Océ-Canada Inc.
525, Logan Avenue,
Toronto, Ontario M4K 3B3
Canada

Océ Office Equipment (Beijing) Co Ltd.
Xu Mu Cheng
Chaoyang District
Beijing 100028
China

Océ-Česká republika s.r.o.
Hanusova 18
14021 Praha 4
Pankrác,
Czech Republic

Océ-Danmark A.S.
Kornmarksvej 6
DK 2605 Brøndby
Denmark

Océ-France S.A.
32, Avenue du Pavé Neuf,
93161 Noisy-le-grand, Cedex
France

Océ-Deutschland GmbH
Postfach 101454
4330 Mülheim an der Ruhr (13)
Deutschland

Océ (Hong Kong China) Ltd.
12/F 1202 The Lee Gardens
33 Hysan Avenue, Causeway Bay
Hong Kong

Océ-Hungária Kft.
P.O.B. 237
1241 Budapest
Hungary

Océ-Italia S.p.A.
Strada Padana Superiore 2/B
20063 Cernusco sul Naviglio (MI)
Italia

Océ Systems (Malaysia Sdn. Bhd.)
#3.01, Level 3, Wisma Academy
Lot 4A, Jalan 19/1
46300 Petalig Jaya
Malaysia

Océ-Nederland B.V.
P.O.Box 800
5201 AV ‘s-Hertogenbosch
The Netherlands

Océ Norge A/S
Postboks 53, Grefsen
0409 Oslo 4
Norway

Océ-Poland Ltd.
ul. Łopuszańska 53
02-232 Warszawa
Poland

Océ-Lima Mayer S.A.
Av. José Gomes Ferreira, 11
Ed. Atlas II Miraflores
1495 Algés
Portugal

Océ (Far East) Pte. Ltd./
Océ (Singapore) Pte. Ltd.,
#03-00 Wisma Gulab
190 MacPherson Road
Singapore 348548

Océ España SA
Business Park MAS BLAU
C/Osona 2, 2-3a Planta
08820 El Prat del Llobregat (Barcelona)
Spain

Océ-Svenska AB
P.O.box 1231
S-164 28 Kista
Sweden

Océ-Schweiz AG
Sägereistrasse 29
CH8152 Glattbrugg
Switzerland

Océ (Taiwan) Ltd.
No. 99-24 Nan Kang Road Sec.2
Taipeh, Taiwan
Taiwan, RO

Océ (Thailand) Ltd.
16th Floor, B.B. Building
54 Asoke Road, Sukhumvit 21
Bangkok 10110
Thailand

Océ-U.K.Ltd.
Langston Road
Loughton, Essex IG10 3SL
United Kingdom

Océ-USA Inc.
5450 North Cumberland Av.
Chicago, Ill. 60656
U.S.A.

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Océ Graphics Server L

Installation Manual

Océ-Technologies B.V.

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Code number 7055890
Edition 1.1

US

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Chapter 1
Read Me First

This installation manual explains how to install the Océ Graphics Server L software on your server workstation and how to connect your server to your network.

How to use this manual

Who should use this manual?

This manual is intended for systems administrators or advanced users responsible for setting up the Server workstation and the client workstations on the network.

Once the software has been successfully installed, see the Océ Graphics Server L Startup Manual for information on how to use the software.

How is this manual organized?

This manual is divided into the following chapters:

Chapter 1 - Read Me First describes the contents of this manual and how to use it.

Chapter 2 - Installing the server and printer software describes what you need to do before you install the software package and how to install the server software and the necessary printer files for the Océ 5350 printer.

Chapter 3 - Connecting the Server to the network describes how to connect your Océ Server to your network. This chapter describes the connection procedure for several different types of networks.

Chapter 4 - Setting up workstations explains how to set up Apple Macintosh and Windows PC workstations that are on the same network as the Océ Server so that users can send files from their workstations to the Océ Server.

Index - A quick reference section

Chapter 2
Installing the Software

This chapter explains how to install the Océ Server software from the Program Installation CD and the Support disk on your PC. The software is very easy to install because the Océ Server Install Wizards present straightforward options for you to choose from.

Before you begin

What should my Océ Server package contain?

Your Océ Server package should include the following:

- Océ Server Program Installation CD
- Océ Server Support Disk
- 2 x Apple Macintosh Workstation Setup Disks
- User documentation
- Dongle (a hardware protection device to be attached to your computer)

What do I use each disk for?

▼ **The Océ Server Program Installation CD**

Setting up an Océ Server You use the Océ Server Program Installation CD to set up a computer as a Server.

Setting up an Océ Server Remote RIP Server When you install the programs from the Océ Server Program Installation CD on your computer, the Océ Server Remote RIP Server software is included as part of the installation. This means that installing these programs not only sets up your computer to act as a print server on your network in the normal way, but also sets up your computer as an Océ Server Remote RIP Server.

Setting up PC workstations as Remote RIP Clients The Océ Server Remote RIP Client software is also contained on the Océ Server Program Installation CD.

To set up a PC workstation on your network as a Remote RIP Client, insert the CD at the workstation and run an Océ Server Remote RIP Client install wizard. (You can also access and run this install wizard across your network if the workstation does not have a CD-ROM drive.)

▼ **The Océ Server Support Disk**

Setting up an Océ Server You use the Océ Server Support disk to set up a computer as a Server.

Setting up your printer The Support disk contains programs which convert the output of the Océ Server to a form that is understood by your printer.

The Apple Macintosh Workstation Setup Disks

You use the Apple Macintosh Workstation Setup disks to:

- Install the necessary programs for you to send PostScript jobs from an Apple Macintosh workstation to the Océ Server.
- Set up an Apple Macintosh workstation as a Remote RIP Client.
- Enable support for older versions of applications, e.g. Aldus and QuarkXPpress applications.

What are the hardware and software requirements?

General

The recommended hardware for the Océ Server to run on is:

- Pentium 166 MHz or higher processor
- Minimum 64 MB of RAM
- VGA or higher graphics adapter
- 500 MB or larger hard drive
- CD-ROM drive
- 3.5" floppy disk drive
- NE 2000 compatible network interface card (NIC)
- Windows NT Server 4.0 operating system

The recommended system configuration for the Océ Server depends upon the number of instances of the Server that you wish to run. All aspects of the system have an effect on performance, and should therefore be considered as a whole rather than individually.

Processor

Number of processors = Number of instances of the Océ Server

Memory

Memory = Minimum 64 MB x Number of instances of the Océ Server

Display Although the Océ Server can operate with a standard VGA display adapter, a monitor and video card capable of displaying at least 256 colors at 640 x 480 dpi resolution is recommended. A system with support for 65,536

or even 16.7 million colors will give appreciably better color quality and is required for on-screen color correction.

Disk Drives

The speed of the hard disk subsystem is very important since it is used for storage of incoming jobs sent by workstations and for temporary files that the Océ Server generates during processing.

For best performance, both the operating system and each instance of the Océ Server should have their own hard disk, ideally with each driven from its own PCI bus-mastering hard disk controller. The bandwidth of the controller should be the highest possible.

Therefore, when running two instances of the Océ Server, three hard disks are required. Details of how to configure the system to make best use of the available hard disk resources are given in the Océ Server Reference Manual.

Network

The Océ Server is compatible with any network interface card (NIC) and protocols that are compatible with the host operating system. Examples of the hardware include Ethernet 10BASE-2 (Thinnet), 10BASE-5 (Thicknet), 10BASE-T (Twisted-pair) and Token Ring. The network protocols include TCP/IP, Microsoft Windows Networking and AppleTalk, although there are many others. Please see chapter 3, ‘Connecting the Server to your Network’ on page 15 for further information.

Operating System

Windows NT Version 4.0 is the necessary operating system for running multiple instances of the Océ Server. This is because, unlike Windows 95 and Windows NT Version 3.51, Windows NT Version 4.0 supports multiple processors.

Windows NT Version 4.0 is available in two forms, Windows NT Workstation and Windows NT Server. Windows NT Server includes the Services for Macintosh network software which is required when connecting the Server to Macintosh workstations.

What is a dongle?

A dongle is a hardware protection device. The Océ Server is delivered with a Sentinel SuperPro dongle. Each dongle is a small rectangular cream-colored device with a 25-pin plug at one end and a socket at the other.

The number of dongles supplied in your Océ Server package depends upon how many printers that you wish to drive at the same time. For each additional printer there will be an additional dongle.

The dongles should be plugged into the LPT1 parallel port of your Océ Server, piggy-back style. A maximum of five dongles can be connected this way. The dongles are completely transparent to any other devices connected via the parallel port.

Please note that driving two printers simultaneously from one Océ Server will generally be slower than running one printer on each of two separate Servers.

If you have plugged the dongle into the parallel port of your Océ Server but the Server does not start and a dialog box saying 'Dongle Protection Failed' is displayed, ensure that the parallel port has been activated in the PC's BIOS setup. For further information, contact your dealer.

Installing the Océ Server programs

1. Make sure your hardware protection device (dongle) is plugged into a parallel port. Insert the Océ Server Support disk in the floppy disk drive. Insert the CD in the CD-ROM drive.
2. If your computer supports AUTORUN, double-click on the CD icon and the setup will start automatically. Otherwise, follow Step 3.
3. Run **E:\SETUP.EXE,** where **E:** is the drive letter of your CD-ROM drive.
4. The Océ Server Support Disk Location dialog box will appear. The default floppy disk drive is **A:**. If this is incorrect for your computer, either type in the appropriate drive letter directly, or click on the **Browse...** button to select and specify the appropriate drive letter. When the drive letter is specified correctly, click on **OK**.
5. The Océ Server Install Wizard will load the files that it needs to operate and display a Welcome dialog box. After reading this, click on the **Next>** button.
6. You will then be prompted to select the type of Server Setup you wish to proceed with. Select the option **Full** to automatically install all the available Océ Server components from the CD. This is the recommended option. However, if you are an experienced user of the Océ Server software, you may wish to select the **Custom** option. When you select the Custom option, an additional dialog box appears, within which you can choose the components you wish to install.
7. A Customer Details window will open for entry of your name, company name and department details in the respective edit boxes. Use the **Tab** key to move to the next edit box. All these entries must be completed for the installation to continue. Click on the **Next>** button.
8. The Select Destination Directory dialog box is displayed. The default destination directory for the Océ Server programs is **\WISPPS** on the drive containing Windows. If you wish to change this default, click on the **Browse...** button. A Choose Directory window will open within which you can specify a different path and directory. Then click on **OK** in the Choose Directory window to return to the Select Destination Directory dialog box. Click on the **Next>** button.
9. If the specified destination directory does not currently exist on your computer, the Océ Server Install Wizard will display a message informing you of this and asking if you wish to create the directory. Click on the **Yes** button. The installation will now proceed.
   If the Install Wizard finds an earlier version of the Océ Server already on your computer, you will be offered the choice of installing the new Océ Server

application and backing up older files, or leaving the old software in place and installing the new version in another directory. The second option may overwrite important files that the Server needs, so unless you are very familiar with the file structure of the Océ Server, click on the **Next>** button.

10 A window will appear, informing you of the progress of the installation.

11 The Setup Complete dialog box appears. Make sure the option to restart your computer now is selected and click on the **Finish** button. Your computer will then restart.

Chapter 3
Connecting the Server to your Network

The Océ Server will connect to virtually any network, as its networking is based on simple principles.

Checking if the Océ Server is already configured to use a network

If Windows NT Version 4.0 prompts you for a network password at startup, and if the Network Neighborhood icon appears on the desktop, your Server is already configured to use a network.

Note: *Have the Windows NT installation CD/floppy disks available. You may be prompted to insert these when connecting your Océ Server to your network.*

Configuring the Server to use a Microsoft PC network

1. Click on the **Start** menu, choose **Settings**, and then **Control Panel**. Double-click on **Network**.
2. Click on **Add**… within the Adapters tab.
3. Follow the instructions on the screen. If you are unsure of the kind of network adapter you have, check with your Network Administrator.
4. When you set up a network adapter, Windows 95/NT Version 4.0 automatically sets up the software components that you need to use Microsoft Windows for Workgroups.
5. After setting up the network software, you need to give Windows 95/NT Version 4.0 some information to identify your computer on the network. For example, your network administrator may have assigned your computer to a particular workgroup.
6. Select the **Identification** tab in the **Network** dialog box. Enter a name for your Océ Server, the workgroup name and a brief description of the Server. This will be visible to other users on the network. To avoid problems with other kinds of servers that may be on your network, it is best not to use spaces in the name entered here. For example, call the computer 5350_Server.

Configuring the Server to connect to an AppleTalk network

When Services for Macintosh are installed on the Server, any print queue icon configured in the Server is automatically published on the AppleTalk network as a LaserWriter.

▼ **To install Services for Macintosh:**

1. Click on the **Start** button, go to the **Settings** entry, and then choose **Control Panel**.
2. Double-click on **Network**, then choose the **Services** tab.

3. Click on the **Add...** button. The Select Network Service window appears. Select Services for Macintosh from the list and click on **OK**.
4. Specify the path to the Windows NT Server Version 4.00 distribution files (for example, **E:\i386**). Insert your Windows NT Server Version 4.0 installation CD if necessary. Click on **Continue**.
5. If no NTFS partitions exist, a warning message appears. Partitions defined within Windows NT can be either FAT (backwards compatible with MS-DOS and Windows 95) or NTFS. AppleShare server volumes can only be set up on an NTFS partition; printers can be published as LaserWriters whether the partitions are FAT or NTFS. Click on **OK**.
6. Various files are copied to the hard disk.
7. Click on the **Close** button in the Network dialog box.
8. The Microsoft AppleTalk Protocol Properties dialog box appears, with the General tab selected. Select the default network adapter and AppleTalk zone from the pull-down lists. The Routing tab allows your computer to be configured as an AppleTalk router. Refer to your Windows NT Version 4.00 Server documentation for further information. Click on **OK**.
9. Click on **Yes** to restart the computer. When it restarts, Services for Macintosh will be installed.

Checking if the Server can already connect to Novell NetWare

1. Click on the **Start** menu, select **Settings** and then **Control Panel**.
2. Double-click on **Network**.
3. If **Gateway (and Client) Services for NetWare** is in the list of installed components under the Services tab, the networking software is already installed.

Connecting the Server to Novell NetWare

1. Click on the **Start** menu and select **Settings**. Then select **Control Panel** and **Network**.
2. Click on **Add...** in the Services tab within the Network dialog box.
3. Select **Gateway (and Client) Services for NetWare** from the list of choices, then click on **OK**.

Checking if the Server can provide TCP/IP support

If your network uses TCP/IP protocol, TCP/IP networking software must also be installed on your server.

1. Click on the **Start** menu and select **Settings**, then **Control Panel**.
2. Select **Network** to open the Network dialog box. Click on the **Protocols** tab. If **TCP/IP Protocol** is in the list of protocols displayed in the Protocols tab, the necessary networking software is already installed.
3. Otherwise, click on **Add…** in the Network dialog box to open the Select Network Protocol dialog box. Select **TCP/IP Protocol** from the Network Protocol: list and click on **OK**.
4. Back in the Protocols tab within the Network dialog box, click on **TCP/IP Protocol** and then on **Properties…**
5. The Microsoft TCP/IP Properties dialog box will open. You need to set a TCP/IP address and subnet mask for your Server in the IP Address tab within this dialog box. Check with your Network Administrator to learn the appropriate way to specify this information.
6. Select the **Services** tab within the Network dialog box. Click on **Add…** to open the Select Network Service dialog box. Select **Microsoft TCP/IP Printing** from the list and click on **OK**.
7. Restart your computer.

Checking if the Server can already connect to a UNIX network

1. Click on the **Start** button, go to the **Settings** entry, and then select **Control Panel**.
2. Double-click on **Network**. If SunSoft PC-NFS (or some other NFS client software) appears in the list of installed components under the **Services** tab, it is already installed.

Connecting the Server to a UNIX network

1. Click on the **Start** menu and select **Settings**. Then select **Control Panel** and **Network**. The Network dialog box will open.
2. Click on **Add...**, and click on the **Have Disk...** button in the Select Network Service dialog box. You will need to insert the floppy disk with the NFS client software when prompted.
3. Follow the instructions on screen.
4. The Océ Server must be able to log on to the UNIX server as a valid user. Give the Océ Server an easily recognizable username, such as **PUBLISHER**, and a password.
5. Click the right mouse button on the **Start** menu and select **Explore**.
6. Click on **Network Neighborhood**. This will bring up a dialog box showing all the computers in your workgroup, any NetWare servers you are connected to, and an icon called Entire Network. Click on the Entire Network icon; any UNIX servers will appear in the right-hand section of the window.
7. The structure of this window is hierarchical from network to workgroup to individual computer. If you cannot see the UNIX server, move down the hierarchy by double-clicking on the icons until you do. Double-clicking on the icon for the UNIX server will show the shared directories on this computer.
8. Select **Map Network Drive...** from the **File** menu. Make sure the **Reconnect at logon** checkbox is checked. This will assign the next available letter (e.g. **G**) on Server to point to this shared directory on the UNIX server.
9. In the Océ Server you will need to replace the path of the directory where files for each spool queue are stored (e.g., from **D:\RIP1\Spool1** to a path with the letter assigned to the proper directory on your UNIX server, such as **G:\Spool1**). You do this in the Print Queue tab within the Printer Setup: dialog box for each Print Queue icon.

Connecting the Server to other networks

Some other applications from the MS-DOS and UNIX environment may not allow you to choose where you create your PostScript file. If your application has this capability, set it up to print the files to one of the directories you set up on the Océ Server. If not, you may have to let your application create the PostScript file where it wants and copy it to one of the directories you configured on the Océ Server.

Note: *If your network is not included above, please contact your dealer for advice.*

Chapter 4
Setting up workstations

This chapter explains how to install the necessary software and set up Windows PC and Apple Macintosh workstations so that users can send files from their workstation to an Océ Server spool queue.

Setting up your PC workstations

You can set up Windows PC workstations on the network so that users can send files directly from their workstations to the appropriate spool queue.Users see spool queues as printers on their workstations and send files to an Océ Server spool queue exactly as if they were sending them to a printer.

Setting up workstations for printing

For each workstation, you need to install the appropriate PostScript Printer Definition (PPD) files and make the necessary connection to a Server spool queue using the Printers facility in Windows. When you make a connection from the PC workstation to the Océ Server via the Windows Printers facility, Océ Server automatically installs the appropriate PPD files.

Note: *You also have the option of making a workstation install disk from the Océ Server and using this disk to install the PPD files. This option is only recommended if you are having problems installing the appropriate files via the Windows Printer facility. To make an Install Disk, click on the Network Printing & Control tab of the System Settings dialog box and then click on Create Workstation Install Disk.*

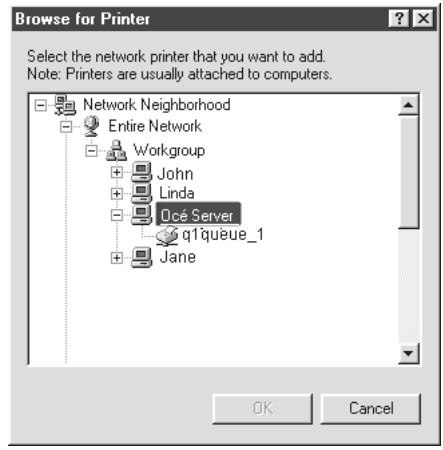
When the connection has been made, applications running on the workstation 'see' the Server spool queue as a printer. Users can then select the spool queue as a printer and print to it from within their applications. For example, in Microsoft Word Version 6.0, the Server spool queue will be listed as a printer in the Printers list box within the Print Setup window.

▼ **To set up a workstation**

1. From the **Start** menu, choose **Settings** and then **Printers**.
2. From the **Printers** folder, select **Add Printer/Connect to Printer…** Follow the instructions on screen.
   As you follow the instructions:

   - Specify that you wish to connect to the Océ Server as a **Network/Shared Printer** at the appropriate stage of the process.
   - If you are prompted to enter a network path, click on the '**Browse…**' button to display a window showing the network printers available for you to connect to.

For example:



If you cannot see the Océ Server, move down the display by double-clicking on the icons until you do. Double-clicking on the Océ Server icon will show the current Server spool queues on the Server.

Note: *If you are prompted to install a printer driver, use the appropriate Workstation Install Disk.*

Setting up workstations as Remote RIP Clients

Installing the programs from the Océ Server Installation CD establishes a subdirectory called **CLIENT** on your Server. For example, the path for the CLIENT subdirectory is **D:\WISPPS\CLIENT**, where D:\ is the drive on which you have installed the Océ Server.

▼ **To set up a PC workstation as a Remote RIP Client**

1. Make a network connection to the subdirectory CLIENT. (Refer to the Windows NT 4.0 documentation for the in-depth procedure).
   Note: *The PC client workstation must have an account on the PC that runs the Océ Server.*
2. Within the CLIENT subdirectory, double-click on **SETUP** to start the Remote RIP Client install wizard.
3. The Select Destination dialog box will open. The default destination for the Remote RIP Client software on the workstation is the drive on which Windows is installed. You can select and specify a different location by clicking on the **Browse...** button. When you are satisfied with the destination specified in the Select Destination dialog box, click on the **Next>** button.
4. The Océ Server Remote RIP Client install wizard will copy the necessary files to the workstation.

▼ **To start Remote RIP Client from the workstation**

If the workstation is running under Windows 95 or Windows NT 4.0:

- Click on the **Start** menu and select **Programs**, then **Client**.

If the workstation is running under Windows NT 3.51:

- Select the **Client** entry in **Program Manager**.

Setting up Apple Macintosh workstations

The software necessary to set up your Apple Macintosh workstations to print to the Océ Server and to operate as Remote RIP Clients is included on your two Apple Macintosh Workstation Setup disks.

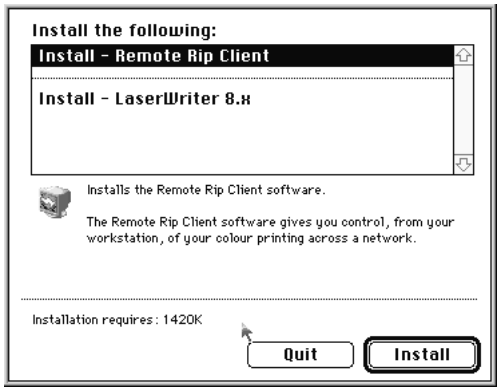
Each workstation that will print to the Océ Server needs to have PostScript Printer Definition (PPD) files installed on it. You will also need to install LaserWriter 8.x on the workstation if it is not already installed. (The Apple Macintosh Client Workstation Setup Disk provides you with an option to install LaserWriter 8.x.)

If you are running older versions of Aldus and QuarkXPress applications on a workstation, you may need to install files in particular locations to support these applications.

Setting up Apple Macintosh workstations

▼ **To set up an Apple Macintosh workstation as a Remote RIP Client:**

1. Insert your Apple Macintosh Client Workstation Setup disk in the floppy disk drive.
2. Double-click on the **Océ Server Client & LJDrv Setup** icon which appears on your desktop. The Océ Server Client & LJDrv Setup window will open. Double-click on the **Océ Server Mac Client & LJDrvs Setup** icon to start the Install Wizard.
3. Click on **Continue** in the Welcome window. The message 'Preparing to install…' will appear, followed by the install choices menu window:


Install the following:
Install - Remote Rip Client
Install - LaserWriter 8.x
Installs the Remote Rip Client software.
The Remote Rip Client software gives you control, from your workstation, of your colour printing across a network.
Installation requires: 1420K
Quit
Install

4. Make sure that **Install - Remote Rip Client** is highlighted as the selected option. Click on the **Install** button. The 'Select disk to install onto:' window will appear. The default is to install Remote RIP Client on your System Disk. Click on the **Switch Disk** button to cycle through and select an alternative available location on your system.
5. Click on the **Install** button to carry out the installation. You can then follow the progress of the installation on screen.
6. When the process is completed, an 'Installation was successful' message will be displayed. You can then either choose to **Quit** the install wizard or **Continue** if you wish to re-display the install choices menu window and install Laser Writer 8.x on the workstation.

   The Remote RIP Client software will be installed on the workstation in a folder called 'Remote Rip' in the location you specified in step 4 above.

▼ **To start Remote RIP client from the workstation**

- Double-click on the Remote Rip folder to open it. Within the Remote Rip window, double-click on the Remote Rip Client icon.

Installing Laser Writer 8.x on workstations

▼ **To install Laser Writer 8.x on an Apple Macintosh workstation**

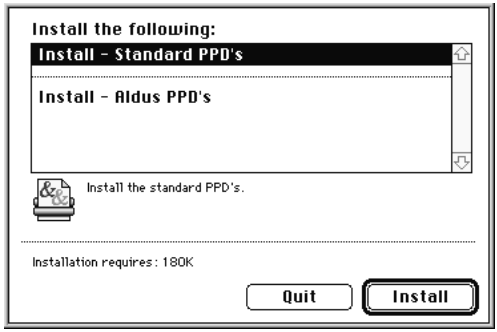
1. Access the install choices menu window from the Apple Macintosh Client Workstation Setup disk. (For details, please see ‘Setting up Apple Macintosh workstations’ on page 26).
2. Make sure **Install - LaserWriter 8.x** is highlighted as the selected option. Click on the **Install** button.
3. The progress of the installation will be displayed on screen. When completed, an 'Installation was successful' message will be displayed. You can then either choose to **Quit** the install wizard or **Continue** if you wish to redisplay the install choices menu and set up the workstation as a Remote RIP client.

Installing the necessary PPD files on workstations

▼ **To install the necessary PPD files on an Apple Macintosh workstation**

1. Insert your Apple Macintosh PPDs Workstation Setup disk in the floppy disk drive.
2. Double-click on the **Océ Server Mac PPDs Setup** icon which appears on your desktop. The Océ Server Mac PPDs Setup window will open. Double-click on the **Océ Server Mac PPD Setup** icon to start the install wizard.

3 Click on **Continue** in the Welcome window. The message 'Preparing to install...' will appear followed by the install choices menu window:



4 Make sure that **Install - Standard PPDs** is highlighted as the selected option. Click on the **Install** button.

5 The progress of the installation will be displayed on screen. When completed, an 'Installation was successful' message will be displayed. You can then either choose to **Quit** the install wizard or **Continue** if you wish to re-display the install choices menu and enable support for older versions of Aldus applications.

Using older versions of Aldus and QuarkXPress

Aldus For each workstation on which you are running Aldus Pagemaker Version 4.x or earlier, and/or Aldus Freehand Version 3.x or earlier, you will need to install Aldus PPD files. The installation process will require you to specify the root folder for each Aldus application.

▼ **To install Aldus PPD files on an Apple Macintosh workstation**

1 Go to the install choices menu window on the Apple Macintosh PPDs Workstation Setup disk. (For details, please see 'Installing the necessary PPD files on workstations' on page 27.)

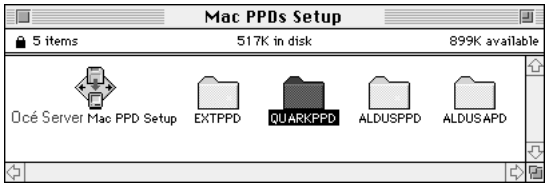
2 Make sure that **Install - Aldus PPD's** is highlighted as the selected option. Click on the **Install** button.

3 A 'Select ALDUS Application Folder' window will open for you to begin selecting and specifying the location on the workstation for the installation. Click on the **Open** button in the window to move down through the levels of folders. When the root folder for the appropriate Aldus application appears,

click on it to highlight it. The Install into "foldername" button at the bottom of the window will display the name of the selected folder. Click on the **Install into "foldername"** button to begin the installation.

4 The progress of the installation will be displayed on screen. When completed, an 'Installation was successful' message will be displayed. You can then either choose to **Quit** the install wizard or **Continue** if you wish to re-display the install choices menu and carry out further installations on the workstation. For example, you may wish to install the Aldus PPDs into a different root folder for a second Aldus application.

QuarkXPress The Océ Server Mac PPDs Setup window includes a QUARKPPD folder.



For each workstation on which you are running QuarkXPress Version 3.x or earlier, you must manually copy the QuarkPDF contained in the QuarkPPD folder to your QuarkPDF folder on the workstation.

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Océ Graphics Server L

Océ Poster Layout

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Code number .
Edition 1.1

US

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Océ Poster Layout Guide

This guide explains how to install and use the Océ Poster Layout application.

Introduction

Océ Poster Layout is a page layout tool designed for use with Océ Graphics Server L.

Océ Poster Layout enables you to import a number of files in a wide range of file formats into the application and lay out the objects contained in the files on a single page. The page can then be printed in its entirety to an Océ Graphics Server L spool queue for ripping and output. Alternatively, you can divide the page into a number of tiles, print each tile via an Océ Graphics Server L spool queue and assemble them later by hand. This means you can output very large pages, such as a design to cover a 20 foot wall or an exhibition stand.

Océ Poster Layout versions

The Océ Poster Layout application is included on your Océ Graphics Server L CD-ROM and is automatically installed on your computer at the same time as the Oc Graphics Server L application.

Using Océ Poster Layout

The Océ Poster Layout online Help file contains an explanation of the menu options and dialog boxes, as well as instructions for the use of the Océ Poster Layout application. You can open this Help file once your application has been successfully installed.

▼ **To open the Help file**

1. Choose Start, then Programs, then the Océ Graphics Server L program folder.
2. From the Océ Graphics Server L program folder, choose the Océ Poster Layout Help icon.

or from within the Océ Poster Layout application

- From the Help menu, choose **Contents** to open the Windows Help utility and display the Océ Poster Layout Help Contents page.
- From the Help menu, choose **Search for Help** to open the Windows Help utility and display the Search dialog box. Choose the desired topic from the list.
- From the Help menu, choose **How To Use Help**; this provides information on how to use the Windows Help utility.

Océ Graphics Server L

What's new from version 5.5 to version 6.2?

océ

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Edition 4.0

GB

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Chapter 1
What's new?

- *Windows 2000 compliance*
- *PostScript 3*
- *Editing with Acrobat*
- *Pass through printing*

Configuration

OGSL version 6.1 is Windows 2000 compliant.

Two hard disks are required to get the best performance from OGSL 6.1. Below is the minimum configuration necessary to run OGSL 6.1 at the best:

- Pentium II 300 MHz (or higher processor)
- 256 MB RAM
- 5 GB (or larger hard drive)
- 3.5” floppy disc drive
- VGA (or higher graphics adapter)
- NE2000 compatible network interface card (NIC)
- CD-Rom drive

Additional functions with PS3

With OGSL 6.1, you can print files generated for PostScript level 3 raster image processors. PS 3 manages the shading functions as in the applications which support this feature.

- Compact format fonts
- Idiom recognition
- Smooth shading for various blends
- PDF rendering

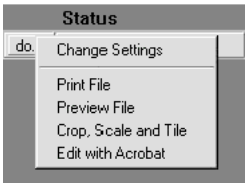
Editing with Acrobat

With the additional purchase of Acrobat, you can edit a print job in PDF:

- If the file is in PDF, it will open in Acrobat for editing
- If the file is in PS, it will distill first, then open for editing

▼ **To edit with Acrobat**

- From the ‘do.’ button, select ‘Edit with Acrobat’.



When you save images edited in Acrobat, bear the following in mind:

- Check that you have deselected the ‘down sampling’ option in Acrobat (‘File menu, Preferences’)
- For colour conversions, select the ‘unchanged’ option in Acrobat (see Acrobat documentation for additional information)
- Save the new PDF file in the OGSL queue directory.

Pass through printing

You can set up print queues for HPGL files as pass through queues. This allows the RIP to relay the files directly to the HPGL interpreter in the printer.

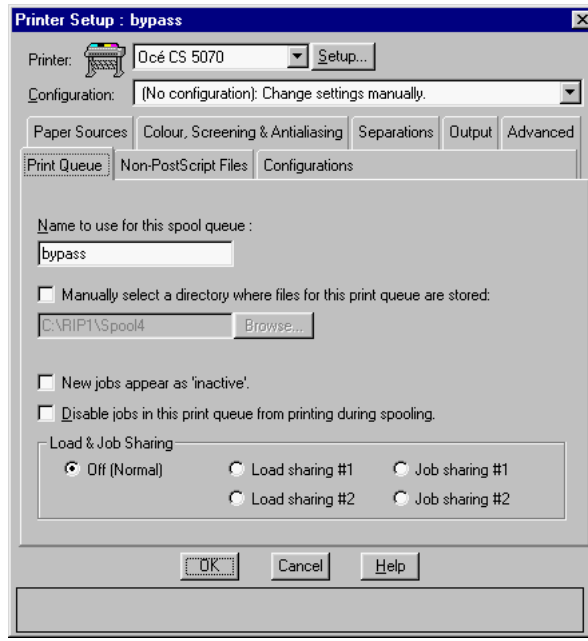
Pass through printing only supports the following file manipulations:

- 'Do - add file to queue'
- 'Do- print file'
- 'Delete via drag and drop'

Caution: *When using the pass through function, do not use unsupported manipulations such as preview, as this will stop the RIP.*

▼ **To add a pass through queue**

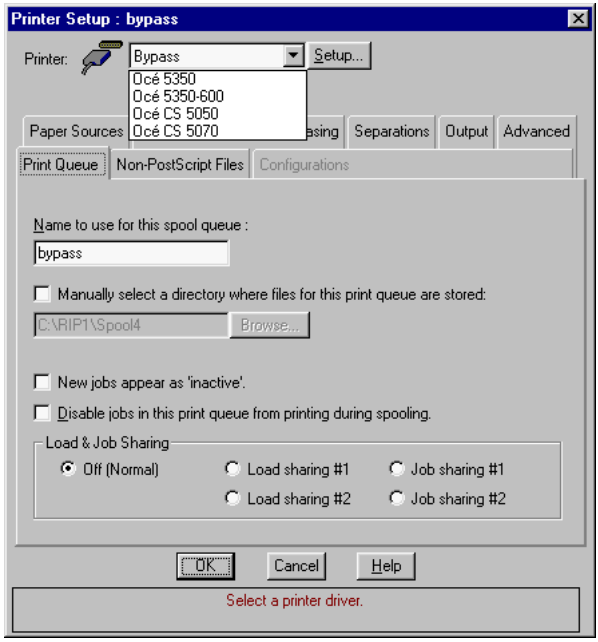
1 From the 'Spooler' menu, select 'Add another queue'.
2 Right-click the new queue and select 'Properties'. A dialog box appears.
3 From the 'Print queue' tab, in the 'Name to use...' box, enter 'Bypass'.
4 Click OK.



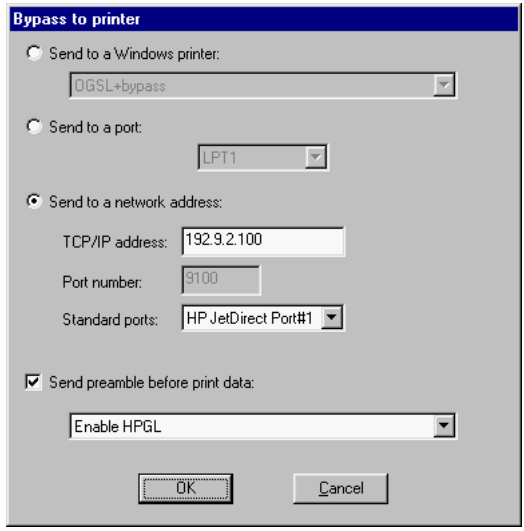
▼ **To configure the bypass queue**

1 Right-click the pass-through queue you have just added, and select ‘Properties’. The printer setup dialog box appears.

2 In the ‘Printer’ drop down list, select ‘Bypass’.



3 Click ‘Setup’. A dialog box appears.



4 Select the option ‘Send to a network address’.
5 Enter the printer’s TCP/IP address.
6 Enter the port number, or select a standard port.
7 Select the option ‘Send preamble before print data’.
8 In the drop-down list of commands, select ‘Enable HPGL’.
9 Click OK.

Chapter 2
Dual Rip

This optional feature enables to use two rips at the same time on the same machine.

In this chapter, you will find :

- *how to install and use the Dual Rip option in OGSL.*
- *how to use the Dual Rip-related features: Job and Load Sharing .*

Prerequisites

To set up the Dual Rip option, you need to install OGSL. If OGSL is already installed, you **must** uninstall it.

▼ **Uninstall OGSL**

1. In the Windows ‘Start’ menu, select ‘Programs’, ‘OGSL’ and then ‘Uninstall’. The Uninstall OGSL screen is displayed.
2. Press ‘Next” to continue the uninstall procedure.
3. Select all the components to uninstall and click ‘Next’.
4. Press ‘Uninstall’ to begin the uninstall procedure. A message is displayed to inform you that the uninstall is completed.

▼ **Before setting up OGSL, check** all the needed devices are available:

1. The OGSL installation CD-Rom
2. The Dual Rip dongle
3. The ‘OGSL Dual Support disk’

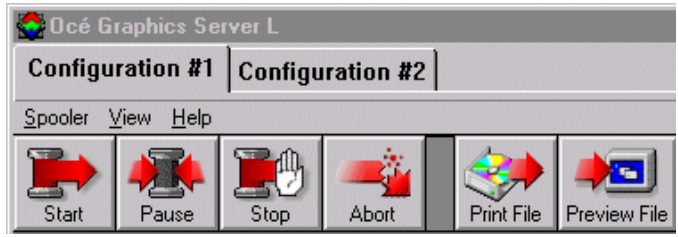
▼ **Launch OGSL Dual setup**

1. Set the Dual Rip dongle on the port.
2. Insert the CD Rom and Support disk in the drives. The setup programme is launched automatically.

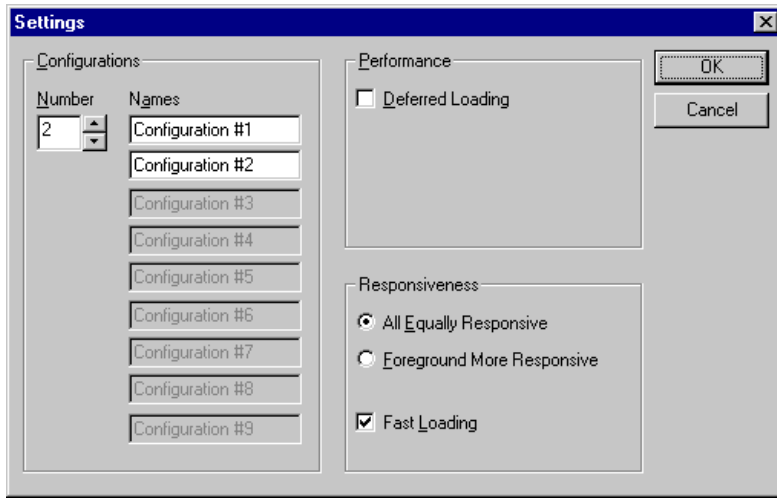
To configure the Dual Rip

1 From the Windows ‘Start’ menu, select ‘Programs’ then ‘OGSL’.

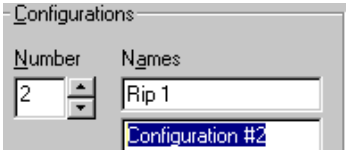
2 From the OGSL menu, click ‘Multiple Rip Front end’.
The OGSL window is displayed with two Configuration tabs by default, ‘Configuration #1’ and ‘Configuration #2’:



3 Click on the icon in the top left corner and select ‘Settings’.
The ‘Settings’ window is displayed:



Configurations Select the number of rips you want to run (using the up and down arrows next to 'Number'). You may rename them (entering directly the names in the corresponding 'Names' boxes):



Note: *The Dual Rip dongle allows to configure several rips but can only rip 2 files at the same time.*

Performance Keep 'Deferred Loading' unchecked (as in the default setting) if you want both instances to be loaded when starting up.

If you check the option, only the first instance is loaded when starting up. The other rip would then be loaded only by clicking its tab.

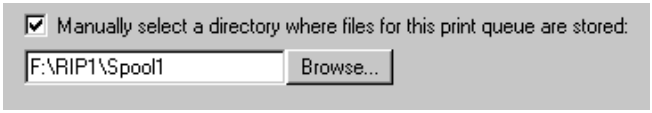
Responsiveness If 'All Equally Responsive' is checked (as in the default setting), none of the instances is given the highest priority for the printing. On the contrary, if 'Foreground More Responsive' is checked, the highest priority is given to the currently displayed and selected instance.

Fast Loading When the option is enabled (as in the default setting), Rip 2 is loaded even if Rip 1 is busy.
If you uncheck it, then the loading is suspended until Rip 1 has completed its job.

▼ **How to move a job from Rip 1 to Rip 2**

You may need to move a job from one rip to another one. This action is not possible with a simple drag and drop. What you need to do is to configure two similar queues for the two Rips. Here is the procedure:

1. In Rip 1, right-click the queue icon and select 'Properties'.
2. Press the 'Print queue' tab.
3. Check the directory where files are stored:



4. Click on Rip 2 tab and repeat steps 1 and 2.
5. Enter the same directory in the above box. The job present in Rip 1 queue is now also available in Rip 2 queue.

Load and Job Sharing

Prerequisites

These two print sharing options are available along with the Dual Rip option so you need the Dual Rip dongle to be set to use them. Otherwise, the options are greyed.

Note: *The Load/Job sharing options will only work via the network and not from the OGSL application itself.*

Load sharing

Note: *Load and Job sharing are only available for new jobs sent from workstations.*

Principle

When you send a job to any printer part of a same load sharing, the job is printed not inevitably on the selected printer but on the load sharing printer with the shortest queue.

Example

Printer A and Printer B are part of the Load Sharing #1 group.

You need to print a 50-pages document. You send it to Printer A. OGSL checks the queues of every printer belonging to load sharing #1. Printer A has 10 active jobs in its queue. Since Printer B has no active jobs in its queue, your document is printed on Printer B.

Job sharing

Principle

When you send a job to any printer part of a job sharing, the job is printed not only on that printer but on ***all the*** printers part of the same job sharing.

Note: *The amount of copies will be multiplied by the amount of 'job shared' printers.*

Example

Consider you want to print 50 copies of a job. Printer A and Printer B are part of the same job sharing group, Job Sharing #1. When you send the job to Printer B, it is printed not only on that printer but on Printer A. In other words, 50 copies are printed on Printer A and 50 copies on Printer B.

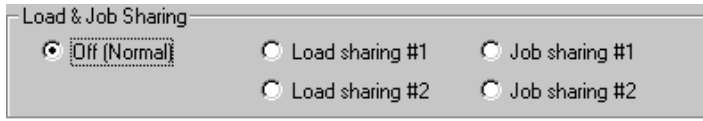
Define Load/Job sharing groups

Both options rely on the same basic principle: several print devices belonging to a same sharing group. You can group printers together between:

- two different load sharing groups (‘Load Sharing #1’ and ‘Load Sharing #2’)
- two different job sharing groups (‘Job Sharing #1’ and ‘Job Sharing #2’).

1 In the OGSL main window, right-click on the printer icon and select ‘Properties’.
The ‘Printer Setup’ dialog box is displayed.

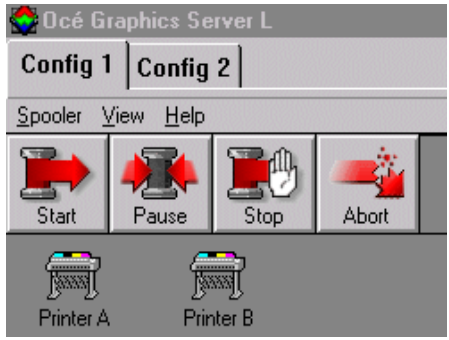
2 Click the ‘Print Queue’ tab.
The ‘Job & Load Sharing’ options are available in the bottom box :



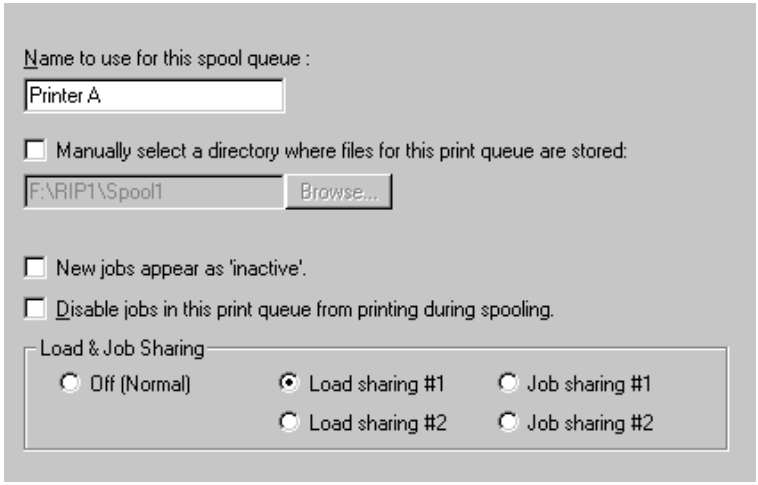
3 Select the option you need.

▼ **How to configure load sharing groups**

Case scenario : you need to configure Printer A and Printer B together in the Load Sharing #1 group.



1 Right-click on Printer A icon and select ‘Properties’.
2 In the ‘Printer Set up’ dialog box, click ‘Print Queue’ tab.
3 In the ‘Load & Job Sharing’ section, select ‘Load Sharing #1’.

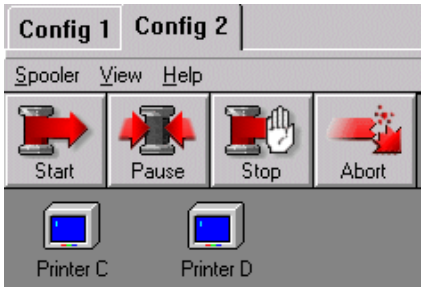

Name to use for this spool queue :
Printer A
Manually select a directory where files for this print queue are stored:
F:\RIP1\Spool1
Browse...
New jobs appear as 'inactive'.
Disable jobs in this print queue from printing during spooling.
Load & Job Sharing
Off (Normal)
Load sharing #1
Job sharing #1
Load sharing #2
Job sharing #2

4 Repeat steps 1 to 3 for printer B.

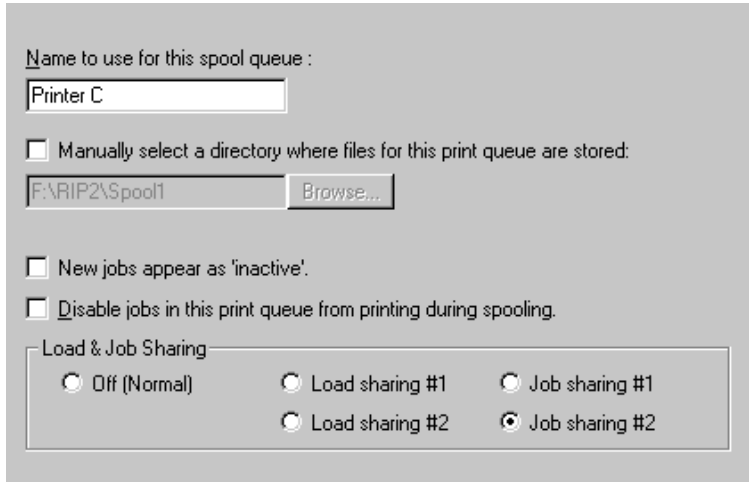
Printers A and B now belong to the same Load Sharing group, which means, whenever you send a job to one of those printers, the job will be printed only on that printer with the smallest queue ("lowest load").

How to configure job sharing groups

Case scenario: you need to configure Printer C and Printer D together in the Job Sharing #2.



1 Right-click on Printer C icon and select ‘Properties’.
2 In the ‘Printer Set up’ dialog box, click ‘Print Queue’ tab.
3 In the ‘Load & Job Sharing’ section, select ‘Job Sharing #2’.


Name to use for this spool queue :
Printer C
Manually select a directory where files for this print queue are stored:
F:\RIP2\Spool1
Browse...
New jobs appear as 'inactive'.
Disable jobs in this print queue from printing during spooling.
Load & Job Sharing
Off (Normal)
Load sharing #1
Job sharing #1
Load sharing #2
Job sharing #2

4 Repeat steps 1 to 3 for printer D.

Printers C and D now belong to the same Job Sharing group, which means, whenever you send X copies of the same job to one of those printers, this number of copies will be printed on Printer C *and* Printer D.

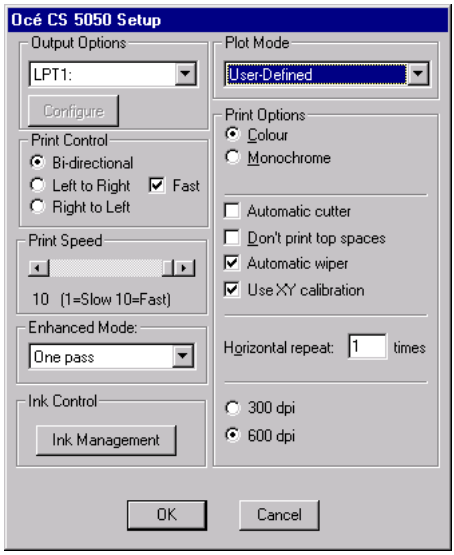
Chapter 3
CS 5050/5070/5090 drivers

Drivers

▼ **To display the printer settings**

1. In OGSL, right click the printer icon.
2. Select ‘Properties’.
3. Choose among the list the printer you want to set.
4. Click ‘Printer Setup’ to display the Settings window.
   Note: *There are differences of menus/options/terminology between the printer settings for the CS 5050/5070 and the CS 5090.*

CS5050/5070



Note: *Selecting any plot mode other than ‘User Defined’ will use the predefined settings in the printer firmware for the following options: Enhanced mode, Print options, Print control, Print speed, Print quality.*

Print Control Choose the direction you want the printer to print to (from 'Left to Right' or 'Right to Left' or both if you select 'Bi-directional').

Print speed Move the cursor to increase (move to the right) or decrease (move to the left) the print speed.

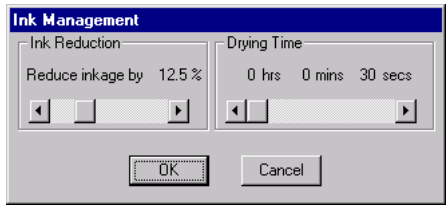
Enhanced mode Select the number of passes for the print. The number of passes indicates how many times the cartridges must fire to lay down the ink for a complete scan line. When increasing the amount of passes a higher print quality will be obtained, the chance of defects like banding and bleeding will decrease. Whereas less print passes means higher speed.

The tables summarize the predefined passes for every option (except 'User defined'):

CS5050/5070

Plot mode	Number of passes
Draft	One pass
Production	Two passes
Quality	Three passes
Photo	Four passes
User defined	Ten passes

Ink Control Click Ink Management to set Drying time.



Note: *Ink Reduction is not supported for bitmap information sent to the printer and therefore will not have any effect using OGSL.*

- Drying time: Move the cursor to increase or decrease the drying time to apply once the job is printed. The printer will be blocked for this time. For instance, feeding media or cutting can only be activated after the drying time is passed.

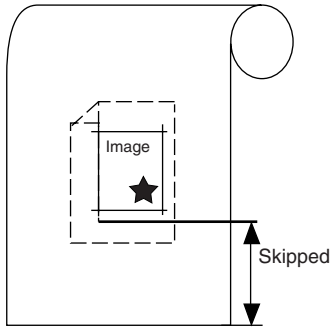
Plot mode Select the quality mode you want to set for the print.

Print options Choose the print option you want to use:

- Colour
- Monochrome

Automatic cutter When this option is checked, the print is automatically cut once printing and drying are over when ‘roll’ is selected as the supply type (Paper option menu of the printer).

Don’t print top spaces Check this option if you want to skip the blank information at the beginning of a print:



Automatic wiper Check this option to make the printer automatically wipe cartridge jet plates.

Use XY calibration Check this option to use the XY calibration of the printer (please refer to the Printer user manual for more details about paper axis calibration).

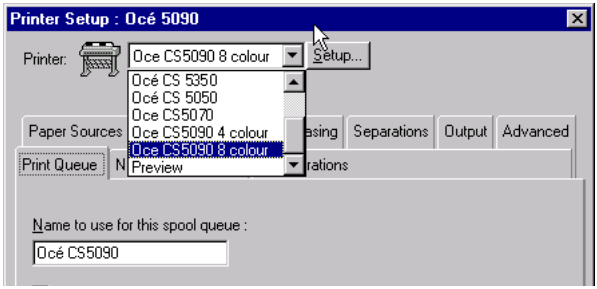
Horizontal Repeat This option enables to select a number of copies of the same job you want to print on a single horizontal line.

Note: *Check if the size of the print fits to the paper roll width. If you choose to repeat the job three times and the total size is larger than the roll width, your job will not be printed properly as requested. It will print until the end of the roll width only.*

Print quality Select the resolution required for the print (300 or 600 dpi).

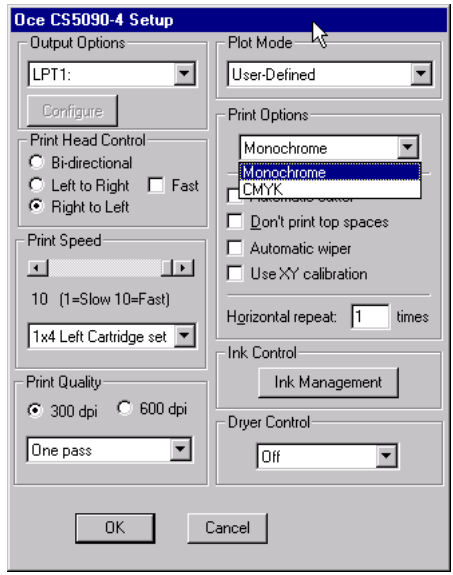
▼ **To display the printer settings**

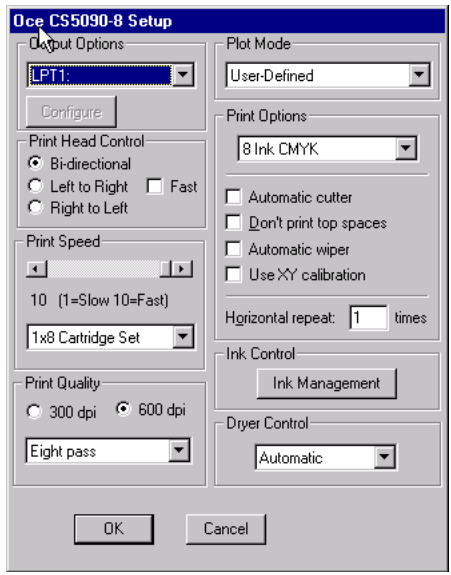
1 In OGSL, right click the printer icon.
2 Select ‘Properties’.
3 Choose among the list the driver for the 8 colours. Make sure you select the correct one because two drivers are available for the CS5090:
   - CS5090 4 colour
   - CS5090 8 colour



4 Select one of the two drivers, 4 or 8 colour.
5 Click ‘Printer Setup’ to display the Settings window.

Note: *Setup windows for both 4-colour driver and 8-colour driver are exactly similar. Some options specific to the 8-colours are also selectable in the 4-colour driver but they do not work. So, make sure you selected the correct driver at first. The only way to check it is to look at the Setup window (Oce CS090-4 Setup or Océ CS5090-8 Setup).*





Note: *Selecting any plot mode other than 'User Defined' will use the predefined settings in the printer firmware for the following options: Enhanced mode, Print options, Print head control, Print speed, Print quality.*

Print Head control Choose the direction you want the printer to print to (from 'Left to Right' or 'Right to Left' or both if you select 'Bi-directional'). Check Fast to increase the speed.

Print speed Move the cursor to increase (move to the right) or decrease (move to the left) the print speed.

Cartridge sets Select the cartridge sets you are using on the printer:

1. CS5090 4-colour:
   - 1x4 Left if you are using the 4 left cartridges (4, 3, 2, 1)
   - 1x4 Right if you are using the 4 right cartridges (Y, M, C and K)
   - 2x4 if you are using all eight cartridges (2xCMYK).
2. CS5090 8-colour:
   - 1x8 if you are using 8 colours.

Print quality Select:

- the resolution required for the print (300 or 600 dpi).
- the number of passes for the print. The number of passes indicates how many times the cartridges must fire to lay down the ink for a complete scan line. When increasing the amount of passes a higher print quality will be obtained, the chance of defects like banding and bleeding will decrease. Whereas less print passes means higher speed.

The tables summarize the predefined passes for every option (except ‘User defined’):

1x4 cartridge set

Plot mode	Number of passes
User defined	Ten passes
Production	Two passes
Photo	Four passes
Enhanced	Six passes

2x4 cartridge set

Plot mode	Number of passes
User defined	Five passes (used to improve quality)
Production	Two passes
Photo	Three passes
Enhanced	Four passes

1x8 cartridge set

Plot mode	Number of passes
User defined	Ten passes
Production	Two passes
Photo	Four passes
Enhanced	Six passes

Plot mode Select the quality mode you want to set for the print.

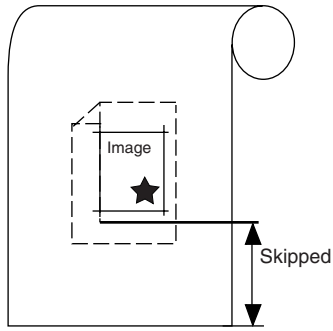
Print options Choose the print option you want to use:

1 For CS5090 4-colour
   - Monochrome
   - CMYK

2 For CS5090 8-colour
   - CMYK
   - 6 ink CMYK
   - 8 ink CMYK
   - CMYKOG
   - 6 ink CMYKOG

Automatic cutter When this option is checked, the print is automatically cut once printing and drying are over when ‘roll’ is selected as the supply type (Paper option menu of the printer).

Don't print top spaces Check this option if you want to skip the blank information at the beginning of a print:



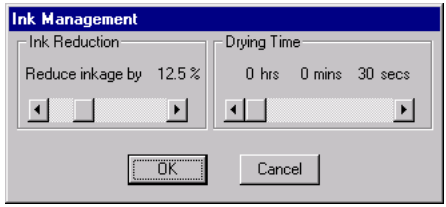
Automatic wiper Check this option to make the printer automatically wipe cartridge jet plates.

Use XY calibration Check this option to use the XY calibration of the printer (please refer to the Printer user manual for more details about paper axis calibration).

Horizontal Repeat This option enables to select a number of copies of the same job you want to print on a single horizontal line.

Note: *Check if the size of the print fits to the paper roll width. If you choose to repeat the job three times and the total size is larger than the roll width, your job will not be printed properly as requested. It will print until the end of the roll width only.*

Ink Control Click Ink Management to set Drying time.



Note: *Ink Reduction is not supported for bitmap information sent to the printer and therefore will not have any effect using OGSL.*

- Drying time: Move the cursor to increase or decrease the drying time to apply once the job is printed. The printer will be blocked for this time. For instance, feeding media or cutting can only be activated after the drying time is passed.

Dryer control Select the mode you want to apply for the printer dryer:

- 'Off': when this mode is selected, the dryer firmware is active (it monitors the ambient temperature and humidity) but does not take into account any printing operation. In this case, the dryer is not activated.
- 'Automatic': when this mode is selected, the dryer firmware monitors the ambient temperature and humidity and calculates the best drying time to apply for each print job. It can also increase the output temperature whenever the print job requires it (for e.g., when a chosen print mode results in an increasing print speed, the increase is automatically detected by the firmware which adjusts the drying time consequently).
- 'On': when this mode is selected, it applies maximum dryer output temperature for every print job, whatever the ambient temperature and humidity is.
- 'Fans only': when this mode is selected, the dryer is working but without the heaters swithched on. It is blowing only cold air. It is advised to select this mode when using specific media that do not support heating. Blowing cold air prevents the media from curling and deforming.

Note: *For more details about the media, pleae refer to the Media Product Information Sheets on www.oce.com.*

CS 5090
8-colours

How to use the 8-colours?

océ

Océ-Technologies B.V.

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Edition 1.0

GB

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Glossary

Chapter 1
Introduction

About this manual

This manual is aimed at explaining the 8-colours system on the CS5090 printers:

- configuration
- calibration and profiles
- dilutions
- use of the 8-colours
- pros and cons of the 8-colours

Note: *This manual is an addendum to the CS5090 user manual and does not replace it. This manual only refers to the 8-colours version.*

Further documentation

This manual is dedicated to the specific use of the 8-colours.

To get more information about the general use of the CS5090 printer, you can refer to:

- the CS5090 User Manual
- the Online Maintenance and troubleshooting guide
- the Product Information Sheets available on www.oce.com

Introducing the 8-colours

The Océ CS5090 range are wide format colour printers that give professional quality output with all the brilliance and gloss of liquid ink.

These printers reduce production time while maintaining exceptional graphics quality.

In order to increase even more the print quality and consequently to respond to the expectations of users, Océ offers an innovative eight-colour technology for superb colour results and breakthrough printing performance.

With the CS5090, you can choose between two different modes:

- The Productivity mode (two sets of cartridges using 4 colours: CMYK). It offers a great improvement in terms of print speed.
- The Quality mode (one set of 8 different colours: CMYK $C_L M_L C_M M_M$[1]). It offers a real improvement in the tonal gradation of your prints thanks to the diluted colours, Light and Medium colours (see chapter 3, 'Diluted colours' on page 15).

With 8-colours, you can also print with two other colours, Orange and Green, which enable to expand the colour gamut. This expanded gamut mode is not supported by Océ yet.

1. L: Light, M:Medium

Chapter 2
Quality versus Productivity

Cartridge configuration

Productivity mode

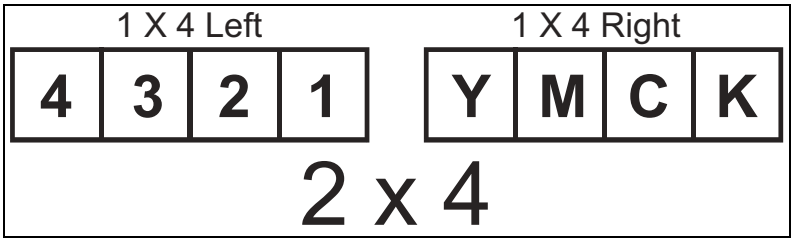
With the Productivity mode, the CS5090 printer offers three different options in terms of cartridge configuration:

- 2x4 cartridge: you can install 8 different cartridges, but only 4 colours (CMYK).
- 1x4 Left (using only the 4 left cartridges)
- 1x4 Right (using only the 4 right cartridges)

There are two main characteristics in the Productivity mode:

- speed: the Productivity mode provides 2x4 printing for fast four-colour process printing.
- flexibility : With the two cartridge sets, you can use at the same time two different ink sets. For instance, you can install 4 Outdoor Colour cartridges on the left and 4 Standard Colour cartridges on the right.

Cartridge set The figure below shows the correct cartridge sequence to follow when using 2x4, 1x4 Left or 1x4 Right cartridge configuration. Please follow the right order as shown below (from left to right) to place the reservoirs and cartridges:



Quality mode

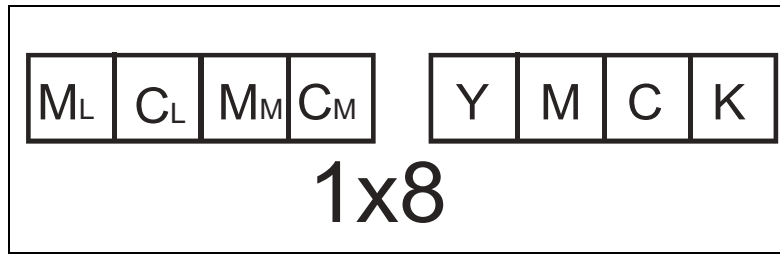
The quality mode offers one more configuration:

- 1x8 cartridge

This means you use 8 cartridges with 8 different colours:

- Four basic colours (same as for the 4-colours version): CMYK.
- Four newly added colours, known as ‘diluted colours’: Light Magenta, Light Cyan, Medium Magenta, Medium Cyan (see ‘Diluted colours’ on page 16).

Cartridge set The figure below shows the correct cartridge sequence to follow when using 1x8 cartridge configuration. Please follow the right order as shown below (from left to right) to place the reservoirs and cartridges.



Choose a configuration

Choosing between Productivity and Quality mode depends on which criteria you want to privilege, speed/flexibility (Productivity mode) or photo quality (Quality mode).

Pros and cons

Productivity mode

Advantages of the 4-colours

- High printing speed
- Faster turnaround time
- Capacity to hold two different ink sets at the same time.
- Instant switching from one ink type to another. The 12-line ink set system allows to use different ink sets without cleaning the ink lines. A simple change of ink reservoirs and heads is needed.
- Drying system that avoids waiting time before further processing (lamination) since the print is dryed not after the print is finished but while it is printing.

Inconveniences of the 4-colours

- More graininess
- Less sharpness

Note: *Both inconveniences are only visible at distances closer than 1 or 2 meters.*

Quality mode

Advantages of the 8-colours

- unmatched tonal gradation
- less graininess
- improved sharpness
- outstanding colour fidelity
- photo-realistic results

Inconveniences of the 8-colours

- more ink and water used on the paper. An image usually consists of more light and mid-tones than full tones. All light colours are usually made out of "full ink" (using CMYK). But with diluted inks (Light and Medium Cyan and Magenta), the light tones are made out of light inks. That is why with the 8-colours printer, you are using a higher volume of light colours than full colours.

Note: *6-colour printers present the same characteristic of higher ink consumption.*

- possible bleeding or coalescence if you do not use Océ's configurations. These configurations are aimed at minimizing these negative effects to get the best possible quality.
- more risks on drying problems if non-Océ profiles are used and if heating is on when using certain types of media.
- normal print speed

Install reservoirs and cartridges

Fill the reservoirs

Note: *To place the ink reservoirs in the right order, see the sticker on the carriage. Observe the ink order from left to right as follows: 4 (Yellow or Light Magenta), 3 (Magenta or Light Cyan), 2 (Cyan or Medium Magenta), 1 (Black or Medium Cyan), Yellow, Magenta, Cyan, Black.*

▼ **To fill the ink reservoirs**

1. Access the ink reservoirs on the left side of the printer. Unscrew the cap of one reservoir.
   Note: *Open only one reservoir at a time to prevent contamination with other ink colours.*
2. Remove cap from the bottle.
3. Check that you are using the same type of ink in all the reservoirs and cartridges.
4. Fill the reservoir up to 375 ml, or no more than 1/2 inch from the top of the reservoir.
5. Check that there is no excess ink on the reservoir cap.
6. Replace the cap on the reservoir.
7. Repeat for the remaining reservoirs.

Place cartridges

▼ **To place a cartridge**

1. With the printer powered on, press **Utility /Access menu/Access Left** (to place one of the cartridges 4, 3, 2, 1) or **Access Right** (to place one of the cartridges C, M, Y, K) to move the carriage into position for cartridge installation or replacement.
2. The cartridges are prefilled and preprimed. Remove the cartridge from the sealed bag and remove the shipping cap.
3. Place it bottom first into the correct slot on the carriage.
   Note: *Do not remove the blue tape from the jet plate.*
4. Tilt the cartridge up until it clicks into place. Make sure the cartridge is firmly installed.

Chapter 3
Diluted colours

Diluted colours

Description

The diluted inks provide lower densiy colour than the corresponding full density inks for the same area coverage, when printing at 100% coverage.

Using the diluted inks greatly improves the tonal gradation of your print and simulates continuous tone effects (excellent skin tones, for instance).

Diluted colours associated to CMYK enable users to achieve smooth gradation even in the lightest areas of shades.

Visual benefits of diluted colours

Without diluted colours With a traditional 4-colours printer (CMYK), you can only choose one tone for each colour. When your job contains lighter colours, the printer must use halftone technology to create the appearance of such lighter tones.

Halftoning consists of placing fewer dots in a larger area. From a given distance, your eye mixes the dots and the white area and your brain interprets it as a lighter shade.

The inconvenience is more graininess which becomes more visible when you get closer to the print because then it becomes easier to distinguish the dots and the white area.

Use of diluted colours With an 8-colour printer, many of the grainy effects are eliminated. Since the printer has lighter inks available (Light Magenta, Light Cyan, Medium Magenta, Medium Cyan), middle and light tones can be easily reproduced on the print. There are more dots placed on the print and consequently less white area.

Quality is really improved, even when you watch closely to the print. It becomes really hard for your eye to detect the individual dots.

Chapter 4
Calibration and Profiles

Adjust the printer

Importance of adjustment

Printer adjustment is a very important procedure to apply each time you place new cartridges on the printer.

Adjusting the CS5090 8-colours is exactly the same procedure as for the CS5090 4-colours.

To ajust the printer, you need to perform several tests:
- Paper axis test
- Colour deadband adjustment
- Horizontal and vertical adjustment

Note: *Please refer to the CS5090 User manual for more details about adjustment procedures and troubleshooting related to calibration.*

Note: *It might be more difficult to check the test pattern for the diluted inks. Use a magnifying glass to set the correct values and achieve the best possible accuracy.*

Calibration procedure

This procedure is as important as the printer adjustment.

It consists of measuring the Linearization Chart with a Densitometer and calibrating according the Océ Density specifications.

Note: *You can also refer to OGSL Reference Manual for more details on the calibration procedure.*

The densitometer measures the densities of the colours actually produced by your printer as a result of different inputs specified. OGSL automatically creates a calibration CAT file from these density readings and you can then apply the CAT when printing to achieve smooth graduations.

The calibration process involves 7 steps:

▼ **Step 1: Printing out a colour linearization chart from your printer**

1. Right-click the icon of the printer to calibrate and select Properties.
2. Select the Colour, Screening & Antialiasing tab.
3. In the Configuration box, select Calibration set-up-No colour correction applied to turn off all setting.
4. Click OK.
5. Right click the printer icon and select Add file to queue. A browser appears.
6. To calibrate the printer Océ has developped a linearisation test print file. This file is available in OGSL directory (OGSL\Calib\Plinaa4.ps).
7. From the List of active jobs, select Océ linearization A4. Check that you have switched on the printer.
8. Right-click and select Print file. Make sure that the file is being printed A4 portrait. (do not apply any rotation nor any scaling)
9. When printing completes, cut out the A4 size chart and allow it to dry completely. Follow the trim lines when cutting the document.

▼ **Step 2: Reading the values from the chart using an X-Rite DTP32 densitometer**

1. Right-click the icon of the printer to calibrate and select Properties.
2. Select the Colour, Screening & Antialiasing tab to display the printer set-up dialog box.
3. From the Configuration box, select Change settings manually.
4. Click Edit. The CAT editor window appears.
5. Click the Import Modules button.
6. From the CAT import dialog box, select X-Rite DTP import and click OK to open a settings dialog box.
7. Enter the appropriate settings:
   - Type of densitometer (X-Rite DTP32)
   - Comm port to which the densitometer is attached
   - Baud Rate: 19200
   - Handshaking : off
8. Click Advanced to specify the output of a compensation curve, and click OK .
9. Click Connect. The display on the densitometer shows "Wisp-PS CYN"
10. Adjust the XRite slider position. Insert the linearization chart into the densitometer in the direction of the arrow for each colour, starting with Cyan, Magenta, Yellow and Black (the colours are numbered from 1 to 4). The program reads the values communicated by the densitometer in a 4-step process.

▼ Step 3:Adjusting the maximum ink values

1. Like all printing system you must specify the colour system with the maximum ink density specific for your printer. Océ provides that information for you for every paper/ink combination. Enter the appropriate values for each colour, referring to your media specifications for guidelines.
2. Click Use values to calculate the dot area curve for each colour.
   Note: *If the specifications are higher than "Maximum Read" use the "Maximum Read" values as Max Density To Use For Calibration.*

▼ Step 4:Adjusting the dot gain & save the calibration

1. In the CAT Editor dialog box, select the Dot gain checkbox.
2. Under Dot Gain, click the arrows up or down to set the desired value. Most Océ profiles for media/ink combinations are optimized for printing with a 22% dot gain.
3. Leave the Gamma, Brightness and Contrast settings as default.
4. Click the Save as icon and (*.cat).
5. Give the calibration a name (*.cat).

▼ Step 5:Printing using the calibrated curve

1. Right-click the printer icon in the main window and select Properties.
2. Select the Colour, Screening & Antialiasing tab.
3. In the Configuration box, select the medium.
4. In the Configuration box, select Change settings manually.
5. In the Select CAT box, select the CAT file you have just saved.

▼ Step 6: Saving the entire configuration

1. Right-click the printer icon in the main window and select Properties.
2. Select the Colour, Screening & Antialiasing tab.
3. In the Configuration box, select Change settings manually.
4. Select the Configurations tab.
5. Select the Printer driver options and Colour screening & Antialiasing options checkboxes.
6. Give the configuration a name and click Save.
7. Then click OK.

▼ Step 7: Using the new configuration

1. Right-click the printer icon in the main window and select Properties.
2. Select the Colour, Screening & Antialiasing tab.
3. In the Configuration box, select the new configuration and click OK.

Why it is important to adjust the 8-colours

When using the Quality mode, it is even more crucial to adjust correctly the colours to reduce/eliminate colour shift.

Indeed, when you choose to print with the Quality mode, it means that you need the best possible printer performance and the best image quality at a close distance. This can only be achieved with a good adjustment.

Profiles

New Profiles for the 8-colours

With the launching of the 8-colours and the use of diluted inks, Océ had to define new profiles that are optimized for every ink/media combination.

To obtain the best results from the Quality mode, use these profiles in combination with the standard colour calibration procedure.

Note: *4-colours profiles cannot be used for the 8-colours printer.*

Why new profiles?

As 4-colours profiles cannot be used for the 8-colours printer, Océ defined new profiles for the 8-colours in order to prevent negative effects such as bleeding, drying, coalescence. Profiles were made only for the media for which photographic quality could be guaranteed. This is the reason why you will not find profiles for all existing media.

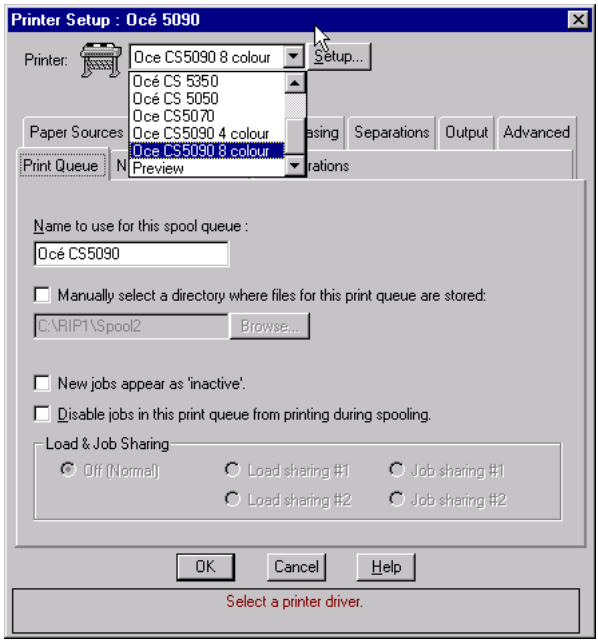
Note: *You can find more information about the media in the Product Information Sheets, available in your OGSL directory: OGSL/Info/Product_Information_ Sheets. You can also refer to www.oce.com for more details.*

Chapter 5
8-colours driver for OGSL

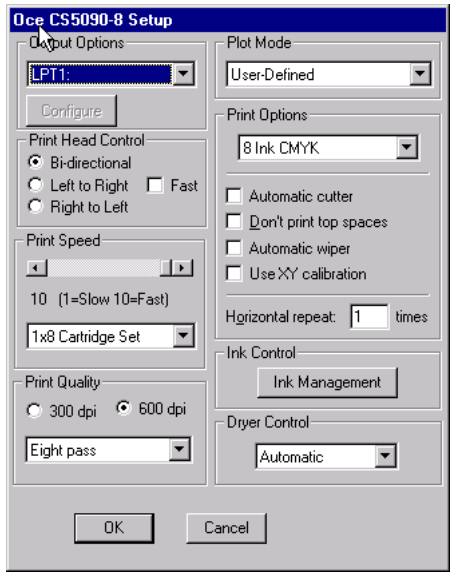
CS 5090 Driver

▼ **To display the printer settings**

1 In OGSL, right click the printer icon.
2 Select ‘Properties’.
3 Choose among the list the driver for the 8 colours. Make sure you select the correct one because two drivers are available for the CS5090:
- CS5090 4 colour
- CS5090 8 colour



4 Click ‘Printer Setup’ to display the Settings window.
Note: *Setup windows for both 4-colour driver and 8-colour driver are exactly similar. Some options specific to the 8-colours are also selectable in the 4-colour driver but they do not work. So, make sure you selected the correct driver at first. The only way to check it is to look at the Setup window (Océ CS5090-4 Setup or Océ CS5090-8 Setup).*



Note: *Selecting any plot mode other than 'User Defined' will use the predefined settings in the printer firmware for the following options: Enhanced mode, Print options, Print head control, Print speed, Print quality.*

Print Head control Choose the direction you want the printer to print to (from 'Left to Right' or 'Right to Left' or both if you select 'Bi-directional'). Check Fast to increase the speed.

Print speed Move the cursor to increase (move to the right) or decrease (move to the left) the print speed.

Cartridge sets Select the cartridge sets you are using on the printer:
- 1x4 Left if you are using the 4 left cartridges (4, 3, 2, 1)
- 1x4 Right if you are using the 4 right cartridges (Y, M, C and K)
- 2x4 if you are using all eight cartridges (2xCMYK).
- 1x8 if you are using 8 colours.

Print quality Select:
- the resolution required for the print (300 or 600 dpi).
- the number of passes for the print. The number of passes indicates how many times the cartridges must fire to lay down the ink for a complete scan line. When increasing the amount of passes a higher print quality will be obtained, the chance of defects like banding and bleeding will decrease. Whereas less print passes means higher speed.

The tables summarize the predefined passes for every option (except 'User defined'):

1x4 cartridge set	
Plot mode	Number of passes
User defined	Ten passes
Production	Two passes
Photo	Four passes
Enhanced	Six passes

2x4 cartridge set	
Plot mode	Number of passes
User defined	Five passes (used to improve quality)
Production	Two passes
Photo	Three passes
Enhanced	Four passes

1x8 cartridge set	
Plot mode	Number of passes
User defined	Ten passes
Production	Two passes
Photo	Four passes
Enhanced	Six passes

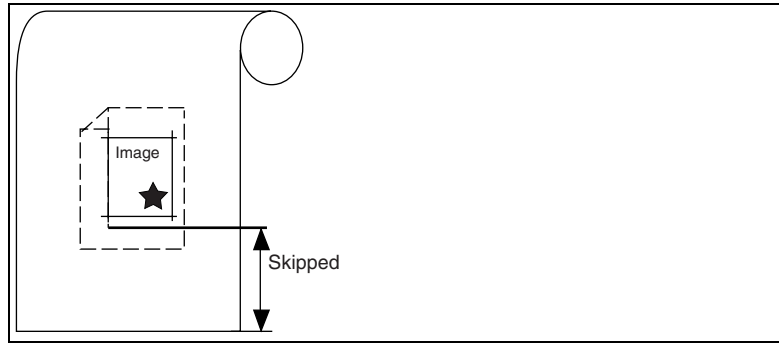
Plot mode Select the quality mode you want to set for the print.

Print options Choose the print option you want to use:

- CMYK
- 6 ink CMYK (CMYK + Medium Cyan & Medium Magenta)
- 8 ink CMYK (CMYK + Light Cyan & Light Magenta + Medium Cyan & Medium Magenta)
- CMYKOG (CMYK + Orange & Green)
- 6 ink CMYKOG (CMYK + Orange & Green + Medium Magenta & Medium Cyan)

Automatic cutter When this option is checked, the print is automatically cut once printing and drying are over when ‘roll’ is selected as the supply type (Paper option menu of the printer).

Don’t print top spaces Check this option if you want to skip the blank information at the beginning of a print:



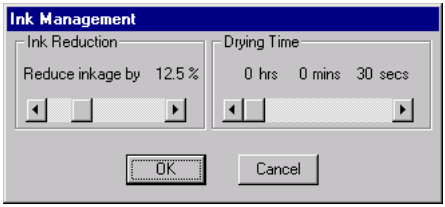
Automatic wiper Check this option to make the printer automatically wipe cartridge jet plates.

Use XY calibration Check this option to use the XY calibration of the printer (please refer to the Printer user manual for more details about paper axis calibration).

Horizontal Repeat This option enables to select a number of copies of the same job you want to print on a single horizontal line.

Note: *Check if the size of the print fits to the paper roll width. If you choose to repeat the job three times and the total size is larger than the roll width, your job will not be printed properly as requested. It will print until the end of the roll width only.*

Ink Control Click Ink Management to set Drying time.



Note: *Ink Reduction is not supported for bitmap information sent to the printer and therefore will not have any effect using OGSL.*

- Drying time: Move the cursor to increase or decrease the drying time to apply once the job is printed. The printer will be blocked for this time. For instance, feeding media or cutting can only be activated after the drying time is passed.

Dryer control Select the mode you want to apply for the printer dryer:

- 'Off': when this mode is selected, the dryer firmware is active (it monitors the ambient temperature and humidity) but does not take into account any printing operation. In this case, the dryer is not activated.
- 'Automatic': when this mode is selected, the dryer firmware monitors the ambient temperature and humidity and calculates the best drying time to apply for each print job. It can also increase the output temperature whenever the print job requires it (for e.g., when a chosen print mode results in an increasing print speed, the increase is automatically detected by the firmware which adjusts the drying time consequently).

- ‘On’: when this mode is selected, it applies maximum dryer output temperature for every print job, whatever the ambient temperature and humidity is.
- ‘Fans only’: when this mode is selected, the dryer is working but without the heaters switched on. It is blowing only cold air. It is advised to select this mode when using specific media that do not support heating. Blowing cold air prevents the media from curling and deforming.

Note: *For more details about the media, please refer to the Media Product Information Sheets on www.oce.com.*

Chapter 6
Frequently Asked Questions

Inks

Why am I using hardly any Black ink with the 8-colours profiles?

Diluted inks (Light Cyan and Magenta, Medium Cyan and Magenta) reduce significantly the graininess of the images.
The only inks that are not diluted are Yellow and Black. Yellow does not contribute to the graininess (contrast is not big enough) whereas Black really increases graininess. That is why the amount of Black should be limited, by not applying any UCR or GCR (UCR and GCR reduce colour inks and replace them by Black ink).
In order to get the least grainy images, Océ's profiles for the 8-colours hardly apply any UCR/GCR. Consequently, there is more colour ink used and less Black ink used.

Why am I using so many light colours rather than full colours?

An image usually consists of more light and mid-tones than full tones. When printing with 4 colours, the light colours are made out of "full ink".
But with diluted inks, the light tones are made out of light inks. That is why with the 8-colours printer you are using a greater volume of light colours than full colours.

What is the extra ink costs using 6 or 8-colours compared to 4-colours?

The ink costs will be higher as you will use more diluted ink (light colours) than normal ink (in case of 4 colours). How much higher depends on many factors such as the medium, the profile, the calibration, the original file.

What is the UV behaviour of the diluted colours?

The UV behaviour for diluted inks is identical to the "full inks".

Profiles

Why are there no 8-colours profiles available for SC2 inks?

GC is a high-quality ink (good gamut, UV stable). These characteristics perfectly fit to the quality mode. Moreover, less drying problems are expected using GC inks compared to SC2.
For these reasons, Océ has not developped yet the profiles and configurations for SC2 inks.

Why are not all media profiled for the 8-colours?

To get the best optimal quality for the quality mode for 8-colours, we have chosen to start only with the media that generate the best quality (glossy, satin, matt, film and backlits). This is why Océ developped profiles only for these specific high quality media.

Why did Océ choose for 8-pass, speed 5?

To get the best optimal quality for the quality mode for 8-colours, Océ chose to minimise the risks of print-quality artefacts usually known when printing on an inkjet printer (like banding and coalescence).
Quality will be optimal on every Océ CS5090 inkjet printer using the the 8-pass mode, speed 5.

Calibration

How can I colour-calibrate the diluted colours?

The normal colour-calibration procedure not only calibrates the normal colours (CMYK), but also makes sure that the diluted colours (light and medium Cyan and Magenta) are calibrated and linearised. When applying the calibration procedure as described in the Printer User Manual optimal colour reproduction is guaranteed.

How often do I need to calibrate?

The 8-colours do not need to be calibrated more often than 4-colours. In general, calibration is needed when cartridges have been changed or replaced, when the media has been changed or when preheaters are changed. When large changes in the environment (temperature or humidity) take place, it is also advised to calibrate.

Media

Why can’t we use every media with the 8-colours?

To get the best optimal quality for the quality mode for 8-colours, we have chosen to start with only those media that generate the best quality: Océ has generated profiles only for the best-in-class media (glossy, satin, matt, film and backlits).

When should I not use drying via the heater?

In some circumstances (using certain media or ink), the heated dryer can result in unwanted interactions like curling media. This is the case for some outdoor media for instance. The new 8-color configurations as supplied by Océ make sure that the active dryer is activated only when allowed.

Halftoning

When should I use which halftoning?

In general, we recommend to use the "normal inkjet" halftoning.

Print quality

Why doesn't the print quality look as good on A4 prints as on large prints?
Normally, print quality for both A4 and large size prints is identical. But in most cases, the viewing distance for large size prints is larger compared to A4, which results in less visible graininess and other potential artefacts.

What is coalescence and why is it more visible with 8-colours?
Coalescence is the "sticking of ink together". Because with 8-colour prints more ink (light tones) is used, the physical habit of sticking together will increase. By using the Océ configurations (and profiles), coalescence is minimised.

What are the differences between 4-colours and 8-colours prints?
8-colour prints use light and medium ink to reduce the graininess and improve the sharpness of the images. It increases the apparent resolution of images.

Why do the colours look the same with 4-colours and 8-colours?
By using light and medium Cyan and Magenta, the color gamut is not expanded. It only increases the apparent resolution of the image and thus reduce the graininess. By using the Océ profiles and the integrated Heidelberg ICC-colour management, colour differences are minimised.

Appendix A
Glossary

Calibration The procedures to adjust the ink cartridge alignment and line length accuracy (see ‘Calibration procedure’ on page 18).

Colour gamut Range of colours that can be formed by all possible combinations of the colours of a colour reproduction system.

Colour management Use of the appropriate software, hardware and methodology to control and adjust colours in an imaging system.

Colour test To clear the ink cartridges by forcing them to fire rapidly. Also, to fill the ink lines with ink.

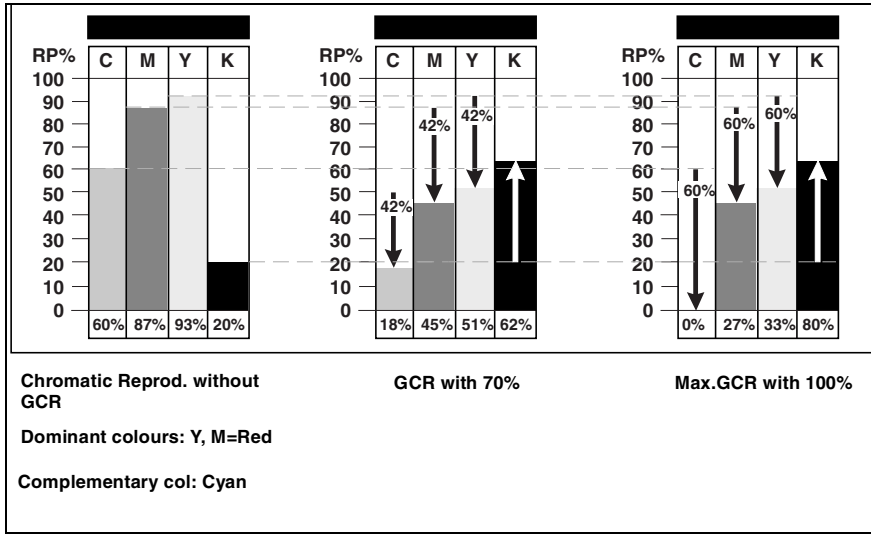
Continuous tone Variation of density within a photographic or printed image, corresponding to the graduated range of lightness or darkness in the original copy or scan.

Diluted inks Inks that provide lower density colour than the corresponding full density version of the same colour for the same area coverage, when printing at 100% coverage. For eg: Light Magenta, Light Cyan, Medium Magenta, Medium Cyan.

Dot gain Increase in the size of screen dots caused by printing. This can make an image appear darker (fuller) and/or colour shifts can occur.

DPI Dots per inch (dpi), the number of dots the printer lays down in an inch.

GCR Gray Component Replacement. Replacement of Cyan, Magenta and Yellow inks with Black when they occur together throughout an image to lower the total ink coverage.



[1] Example of GCR with brown mixed colour

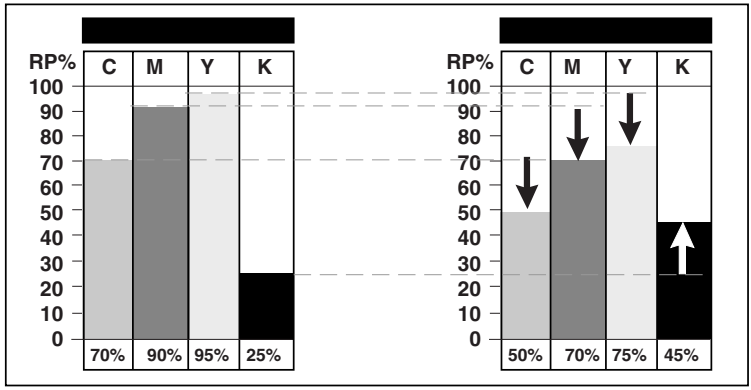
Halftone Image in which the range of tones consists of dots of varying area but of uniform density. It creates the illusion of continuous tone when seen at a certain distance.

Linearization A specific type of calibration in which an output device is adjusted to deliver a straight-line relationship between output and input.

Profile A digital signal-processing transform or collection of transforms, plus additional information concerning the tranforms and device.

Resolution The sharpness of a printed image as measured by dots per inch.

UCR Under Colour Removal. Reduction of Cyan, Magenta and Yellow inks in image shadows and replacement with Black to lower the total amount of ink.



CHROMATIC REPRODUCTION WITHOUT UCR
TOTAL DOT AREA: 280%

CHROMATIC REPRODUCTION WITH UCR
TOTAL DOT AREA: 240%

[2] Example of UCR with brown mixed colour